

***Report to EPA  
on the  
State of Utah's  
Capacity Development Program  
for  
Utah State Fiscal Year 2023  
July 1, 2022 – June 30, 2023***

***Utah Department of Environmental Quality  
Division of Drinking Water  
Salt Lake City, UT  
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UTAH DEPARTMENT *of*  
ENVIRONMENTAL QUALITY  
**DRINKING  
WATER**

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## **Section 1 – State of Utah Capacity Development Program**

### **1.1 Authority**

The Utah Drinking Water Board operates under authority granted in 1981, and upheld through subsequent reauthorizations, under Utah Code Title 19 Chapter 4, the Utah Safe Drinking Water Act. The Utah Drinking Water Board is a 9-person board appointed by the Governor. The Board is empowered to adopt rules governing the design, operation, and maintenance of Utah's public drinking water systems, including Capacity Assessment and Development.

### **1.2 Program Rule**

The Utah Capacity Development Program is codified in Utah Administrative Code Rule *R309-800 Capacity Development Program*. The Utah Department of Environmental Quality, Division of Drinking Water (DDW, the Division) is the primacy agency for the federal Safe Drinking Water Act (SDWA) and implements and oversees the rules authorized by the Drinking Water Board. During FY2023 the Division of Drinking Water completed the process to update *R309-800 Capacity Development Program* to meet the new Asset Management requirements. The updated rule became effective on May 22, 2023. The updated rule is available from the Division of Administrative Rules [website](#).

### **1.3 Program and Budget Resources**

The State of Utah allocates money to a specific Capacity Development set-aside fund in accordance with SDWA program guidelines. The State's fiscal year begins each calendar year on July 1<sup>st</sup> and ends on June 30<sup>th</sup> of the following calendar year. The Division began FY2023 with \$47,800 in the Capacity Development set-aside fund (state financial tracking Unit Code 3823). During the year \$21,041 was charged against this fund. The Division did not request any funding for this set-aside from the FY2023 capitalization grant. The Division expects to have \$26,800 for Capacity Development Program oversight for FY2024.

The Utah Capacity Development Program supports the federal and state Drinking Water State Revolving Fund (DWSRF) programs. For FY2023, the State of Utah Drinking Water Board authorized funding for 93 total projects through the DWSRF programs. 44 of those projects were planning projects and 49 were infrastructure construction or rehabilitation projects. Total DWSRF funding authorizations in FY2023 were approximately \$233,260,159 of which \$204,650,159 was allocated from the federal SRF program, \$21,614,000 was allocated from the State SRF program, and \$6,996,000 was allocated from American Rescue Plan Act funds appropriated to the State of Utah and

then reallocated by the Utah Legislature to the Drinking Water Board.

From the pool of previously authorized projects, Division Staff closed loans to complete the funding process for 27 projects during FY2023. Fourteen of those projects were planning projects and thirteen were infrastructure construction or rehabilitation projects. Total obligated financial assistance funds in FY2023 were approximately \$51,870,463 of which \$35,806,963 was allocated from the federal SRF program, \$1,999,500 was allocated from the State SRF program, and \$14,064,000 was allocated from American Rescue Plan Act funds appropriated to the State of Utah and then reallocated by the Utah Legislature to the Drinking Water Board.

#### **1.4 State Capacity Development Program Strategy Document**

The Division of Drinking Water began updating the State's Capacity Development Program Strategy Document during FY2022. The Division submitted its updated Program Strategy Document to EPA Region 8 on January 9, 2023.

#### **1.5 Asset Management**

House Bill 269 *Capital Assets Related to Water* passed the legislature during Utah's 2022 legislative session and was signed into law by the Governor. This law reads, in part:

“(1) As a condition of receiving state or federal financing or grants to be used for an improvement to a capital asset related to water infrastructure, the governing body of a water provider shall commit to adopt a capital asset management plan.

(2) (a) The Drinking Water Board shall make rules, in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, to establish the elements of a capital asset management plan required under Subsection (1) for a water provider that is a retail water supplier.”

In accordance with the requirements outlined in HB269, during FY2023, the Division updated its DWSRF Program rules, [R309-700](#) and [R309-705](#), and the Capacity Development Program rule, [R309-800](#). The updated rules became effective May 22, 2023. In addition, the following language was added to authorization letters prepared for projects receiving financial assistance through either the federal or state SRF program:

“In compliance with Utah Code Annotated 73-10g-402, water systems applying for federal or state financial assistance for improvements to capital assets related to water infrastructure shall commit to adopt a capital asset management plan. The Asset Management Plan shall be submitted to the Division for review and approval prior to loan closing, unless preparing an Asset Management Plan is included as part of the project for which the Recipient has applied for

financial assistance. In which case, the Asset Management Plan shall be submitted to the Division as soon as it is completed or prior to the entity submitting its final project reimbursement request.”

To further ensure water systems comply with these requirements, asset management plan sections have been added to our loan closing and construction project reimbursement request checklists. Copies of these documents are provided in Appendix A.

## **Section 2 New System Program**

### **2.1 Control Points**

#### **Capacity Development Worksheets or Business Plan**

Utah's legal authority to implement the SDWA's Capacity Development provisions in §1420(c)(2)(A) through (F) is codified in Utah Code Title 19 Chapter 4, the Utah Safe Drinking Water Act. The Utah Drinking Water Board is empowered by this statute to adopt rules governing the design, operation, and maintenance of Utah's public drinking water systems, including capacity development. The Board has adopted Drinking Water Rule *R309-800 Capacity Development Program* establishing a state capacity development program.

Utah's capacity development program rule requires all proposed new systems, or newly discovered systems, to demonstrate adequate technical, managerial, and financial capacity through one of two methods:

1. Proposed new systems must submit a capacity development business plan, defined in R309-800-6(1), to Utah DDW for review and approval before it may serve drinking water to the public. The capacity development business plan requirement has been updated to require proposed systems include an asset management plan.
2. Newly discovered systems must either submit completed [capacity development worksheets](#) or a capacity development business plan, whichever best suits the systems situation, to Utah DDW for review and approval. The capacity development worksheets have been updated to include questions regarding asset management.

Both methods, updated to include asset management, provide water system owners the opportunity to understand the financial and operational commitment necessary to owning and operating a viable, sustainable public water system. They also provide Utah DDW staff an opportunity to discuss these commitments and regulatory requirements, as well as encourage asset management, with owners or prospective owners as well as determine a system's capabilities and capacity to meet the requirements of the SDWA and Utah's drinking water rules.

#### **Engineering and Permitting Approval**

Proposed new systems must obtain an operating permit from the Division prior to providing water for public consumption. Proposed new systems typically follow the standard approval format:

- Submit the [project notification form](#),
- Submit engineering design plans and specifications for all system infrastructure to the Division,

- Submit proof of legal right to use water from the proposed source with documentation provided by the Division of Water Rights,
- Submit a drilling start card from the Division of Water Rights (for well construction only),
- Respond to comments or questions from Division review engineer (if any),
- Receive Division approval for project construction.

After construction, the system applies for the operating permit and submits the following information:

- As-built drawings,
- Engineer’s statement that all plan approval conditions were met,
- Water quality data,
- Any Operation & Maintenance Manuals and as-built drawings,
- Any other relevant documentation used in the plan review process.

The Division has prepared an [Operating Permit Checklist](#) to help water systems ensure they are submitting the proper documents.

### **Initial Order for New Public Water System**

When the Division learns of a newly discovered water system serving the public, one of the first actions undertaken is to notify the responsible party that they are a public water system and therefore are subject to regulation under state and federal statutes. The “Initial Order for New Public Water System” docket notice and cover letter is drafted and sent to the responsible party, via certified mail. A template of the notice and cover letter are included in Appendix D.

In addition to complying with the requirements outlined in the Initial Order, newly discovered systems must also apply for and receive an operating permit before they can receive a system rating and continue legally serving water to the public. This process is very involved and requires considerable time. The process involves site visits by Division and Local Health Department (LHD) staff to inspect and evaluate system infrastructure, investigations to identify any existing engineering plans and specifications, and identifying any other system data or information including but not limited to, ownership records, water quality data, and water rights data. The system’s administrative contact or other responsible party is given specific deadlines by which they must respond to comply with the requirements of the Initial Order. Lack of a response to the Initial Order’s requirements may result in enforcement action against the system.

## 2.2 New Water System List FY2021-2023

PWSID	PWS Name	First Reported to SDWIS	Highest ETT (if over 11 what qtr did the ETT rtn to <11)	Discovered or Planned	TMF self -assessment or TMF assistance - provide narrative
UTAH13060	CLARK BENCH WATER COMPANY	8/19/2020	0	Discovered	Self Assessment – system provided information when applying for financial assistance, system is consolidating with local water conservancy district, infrastructure improvement project is in progress
UTAH29126	COBBLES CONDOMINIUM HOA	8/19/2020	0	Discovered	Assistance – Initial Order for New Public Water System, system is currently rated “Approved” under Utah’s IPS Rule
UTAH24051	DESERT SAGE HOA	8/19/2020	30 Q4/22	Discovered	Assistance – System received guidance and assistance from Division staff and local Improvement District, financial assistance from American Rescue Plan Act to improve infrastructure and consolidate with the local improvement district, project is in progress
UTAH11099	FOOTHILL WUA	11/19/2020	19	Discovered	Assistance – Corrective Action/Enforcement Order, system is currently rated “Not Approved” under Utah’s IPS Rule and is pursuing financial assistance to correct physical deficiencies, system is also working on resolving operator certification, source protection, and monitoring and reporting violations.

**2.2 New Water System List FY2021-2023 (cont)**

UTAH18183	MUIRHOUSE HOA	5/13/2020	3	Discovered	Assistance – Initial Order for New Public Water System, system is currently rated “Approved” under Utah’s IPS Rule
UTAH19080	SAN JUAN SPANISH VALLEY SSD	8/19/2020	1	Planned	Self Assessment – system provided information when applying for DWSRF financial assistance, system is currently rated “Approved” under Utah’s IPS Rule
UTAH29131	THE RUBY	5/23/2022	1	Discovered	Assistance – Initial Order for New Public Water System, Compliance Agreement/Enforcement Order, system is rated “Not Approved” under Utah’s IPS Rule
UTAH29128	WEBER STATE UNIVERSITY - OGDEN CAMPUS	11/19/2020	2	Discovered	Assistance – Initial Order for New Public Water System – the system is currently rate “Approved” under Utah’s IPS Rule
UTAH06045	ARMSTRONG WATER COMPANY	5/23/2022	0		This is a non-public system and therefore not regulated under current SDWA or state statutes

## Section 3 – Existing System Program

### 3.1 Identifying PWSs in Need of Capacity Assistance

#### SDWA §1420(c)(2)(A)

The Division developed and defined a list of specific violations with a corresponding point value based on the severity of the infraction. This list of violations is codified in Utah Administrative Code Rule [R309-400 Improvement Priority System and Public Water System Ratings](#). This rule establishes the system by which the Division assigns compliance ratings to public water systems (PWSs) and prioritizes enforcement action and technical assistance to those systems.

The Improvement Priority System (IPS) Rule was completely revised in 2018 and 2019 and the new rule went into effect January 1, 2020. Rule revisions included examining each violation and its associated penalty points to assure more severe violations were assessed correspondingly more severe penalty points. This revision significantly impacted the number of water systems that would potentially become “not approved” systems. However, Division staff and technical assistance providers worked closely with water system staff and operators to bring systems into compliance and greatly reduced the number of impacted systems.

DDW evaluates a PWS’s compliance record and based on the total number of deficiency points, rates the system as “approved,” or “not approved.” The PWS classification determines how many deficiency points the PWS may accumulate before being assigned a “not approved” status.

Table 1 – IPS Points for “Not Approved” Status

System Type	Assessed Points
Community Water Systems	150
Non Transient, Non Community Systems	120
Non Community Water Systems	100

A “not approved” rating remains in place until the threat to public health is alleviated, or the violation is corrected. However, a water system may qualify for a “corrective action” status, if the PWS submits the following three items:

- A written agreement stating a willingness to comply with the requirements of the Administrative Rules.
- A compliance schedule outlining the necessary construction or changes needed to correct any physical deficiencies or monitoring failures.

- Proof of financial ability to correct the deficiencies.

The “corrective action” rating remains in place until the system has resolved all compliance issues impacting the system’s status.

DDW uses this rating system to identify and prioritize which systems are most in need of technical assistance, training, or other help. This assistance may include any of the following:

- site visits
- administrative orders
- penalties
- on-site training
- hearings
- court action

The Division may provide this assistance using Division staff or by employing a third-party technical assistance provider, such as the Rural Water Association of Utah (RWAU) or Rural Community Assistance Corporation (RCAC). The Division coordinates technical assistance for water systems through a quarterly meeting, the Action Compliance Strategy Meeting, where Division staff meets with technical assistance provider staff and LHD representatives to discuss out-of-compliance water systems and what assistance those systems may need to improve their capacity and return to compliance with SDWA and national water quality standards.

### **3.2 Factors That Impair or Enhance Capacity**

#### **SDWA §1420(c)(2)(B)**

Many factors have the potential to either enhance or impair a water system’s capacity. Division staff and technical assistance providers have held numerous discussions regarding which factors are most likely to affect capacity. While capacity is measured through technical, managerial, and financial aspects, oftentimes a specific factor will have influence across multiple aspects.

For instance, adequate user rates and rate structures is one factor that both Division and technical assistance provider staff identified as having significant impacts on system capacity, across all three topics. Without adequate user rates, water systems will lack the financial wherewithal to hire and train appropriate staff which could negatively impact both technical and managerial capacity. In addition, there may be insufficient funds to pay bills on time which could negatively impact credit worthiness, and therefore negatively impact financial capacity.

Appendix B contains tables of identified factors that will impact water system capacity as well as whether that impact is positive or negative.

### **3.3 Using SDWA Authorities and Resources**

#### **SDWA §1420(c)(2)(C)**

##### **3.3.1 Assist PWSs with Compliance**

The Division has implemented a number of programs and activities to assist water systems achieve and maintain compliance with SDWA and national drinking water standards. A few of these programs are described below.

- The engineering plan review and operating permit program.
  - Water systems are required to submit engineering plans and specifications to the Division for review and approval prior to beginning construction on any facility improvement or expansion.
  - The Division's Permitting Section reviews the submitted plans to assure compliance with the Division's construction rules (codified in Drinking Water Rules R309-500 through -550, available on the Division's website here: <https://deq.utah.gov/drinking-water/laws-and-rules#500>).
  - The Permitting Section typically responds with plan approval or denial within 30 days of receiving the submittal, depending on project complexity and size.
  
- The Drinking Water State Revolving Fund financial assistance program.
  - The Division's Infrastructure Funding Section provides oversight to two revolving fund financial assistance programs.
    - The state-funded program receives an annual allotment from the state sales tax revenue, capped at approximately \$3,600,000 per year.
      - ◆ This financial assistance is available only to political subdivisions of the state (municipalities, water districts, etc.).
    - The federal revolving fund program receives an annual capitalization grant from USEPA based on Congressional allocation and varies from year to year.
      - ◆ Financial assistance from this program is available to both publicly and privately-owned water systems.
  - Financial assistance is available for planning or construction of infrastructure improvement projects designed to help water systems achieve or maintain compliance with SDWA requirements and national drinking water regulations.

- The source water assessment and protection program.
  - The source water assessment program assesses the risk of accidental contamination of all drinking water sources.
  - Utah’s source protection rules require that each public drinking water supplier prepare a source protection plan. The plan must describe and delineate source protection zones and describe protections in place to protect source waters from accidental contamination.
  - All source protection plans must be reviewed and approved by Division source protection staff.
  
- The Sanitary Survey program.
  - Utah state regulations require that a sanitary survey be conducted at least every three years on all public water systems. These surveys assess water system construction, operations, and record keeping and identify potential conditions that may present a public health risk.
  - Sanitary surveys are conducted either by Division of Drinking Water personnel, Utah Department of Environmental Quality District Engineers, local health officials, or other qualified individuals authorized in writing by the Division Director.

### 3.3.2 Encourage Partnerships Between PWSs

Utah encourages partnerships between water systems through a number of different avenues.

#### The Utah Water Quality Alliance

The Alliance consists of the largest surface water suppliers in Utah, as well as small- and medium-sized systems that operate water treatment plants. The Alliance meets quarterly and provides training to water system staff as well as networking opportunities for PWSs. The Alliance’s goals include assisting drinking water utilities with water quality optimization projects, updating utilities on regulatory updates and new regulations, and a commitment to continuous drinking water quality enhancement.

Alliance members work together to find ways to improve monitoring source water and treated water quality, optimize water treatment processes, and enhance treatment plant performance in removing contaminants, evaluate new technologies, participate in drinking water research, provide input in the federal and state regulations, and assist

smaller water utilities to produce drinking water of the best quality for the citizens of the State of Utah.

### Utah WARN

The Utah Water/Wastewater Agency Response Network’s (WARN) mission is to support and promote statewide emergency preparedness, disaster response, and mutual assistance matters for public and private water and wastewater utilities. The Utah WARN website provides members with emergency planning, contact, and recovery information, before, during, and after an emergency.

### System Consolidation and Regionalization

The Division encourages water systems to investigate and implement regionalization or consolidation efforts to the extent possible. Regionalization or consolidation may take on a number of different forms, from merging system infrastructure, to sharing source capacity, to managerial cooperation where multiple neighboring systems share management and operational staff to reduce costs and take advantage of economies of scale and improve buying power.

#### 3.3.3 Assist PWSs through Operator Training and Certification

Water systems serving more than 800 people, and all systems that use physical or chemical treatment processes to alter the water’s characteristics, must have a certified operator. In State Fiscal Year 2023 there were 1,054 documented public water systems in Utah. Table 2 shows the number of each public water system type reported to the state that year.

Table 2 – Public Water System Classification FY23

Type	Number
CWS	505
NTNCWS	83
NCWS	466

The Division’s Operator Certification Program website (<https://deq.utah.gov/drinking-water/operator-certification>) provides individuals with information about the Operator Certification Program, details on how to become a certified water operator, certification application and renewal forms and their associated fees, information on upcoming

continuing education opportunities, continuing education course forms, as well as a frequently asked questions section.

Division records indicate that in Utah there were 2,706 certified water operators holding a total of 3,226 certifications during state FY2023. Also, during FY2023, 637 individuals sat for certification examinations in one or more certification disciplines. Of those 637 individuals, 384 passed the exam, a 60.3% pass rate. Furthermore, during the same time frame 2,083 individual operators participated in 549 reported unique continuing education courses. During FY2023 many courses were offered virtually or combined in-person and virtually. Continuing education courses are offered by a number of different entities, including RWAU, RCAC, the American Water Works Association Intermountain Section (AWWA-IMS), individual water systems, and various online providers. All courses submitted for operator certification continuing education unit credits must be reviewed and approved, or pre-approved, by the Operator Certification Commission Secretary.

### **3.4 Establishing a Baseline and Measuring Improvement**

#### **SDWA §1420(c)(2)(D)**

Utah uses the IPS point system outlined in Utah Drinking Water Rule R309-400 to establish baseline water system regulatory compliance. The Division tracks changes to a water system's deficiency points in the WaterLink database and web application. The WaterLink web application was developed to provide a central access point for Division information related to water systems, including contacts, deficiencies, violations, infrastructure inventories, site visit information, engineering plan review and approval activities, operator certification records, and DWSRF project data.

WaterLink is available on the Internet at: <https://waterlink.utah.gov/deqWater/>. Public access to general water system information is available from the basic WaterLink access page. Access to more specific information requires users to apply for a portal account.

Compliance improvement will be measured on the basis of the number of systems either reducing their deficiency point count, returning to compliance and an "approved" status after being rated either "not approved" or "corrective action," entering voluntary compliance agreements, or applying for and using financial assistance to resolve infrastructure deficiencies.

### **3.5 Identifying Stakeholders**

#### **SDWA §1420(c)(2)(E)**

Stakeholders may include any party interested in evaluating or improving water system capacity. Stakeholders can include any or all of the following entities:

#### Regulatory Agencies

- Environmental Protection Agency
- Division of Drinking Water
- Local Health Department
- County and/or municipal governments
- Governing boards and bodies for privately-owned water systems

#### Technical Assistance Providers

- RWAU
- AWWA-IMS
- RCAC
- Educational Institutions
- Environmental Finance Centers

#### Associations

- League of Cities and Towns.
- American Planning Association
- Utah City Engineers Association

This list is by no means all-encompassing, and many other groups may consider themselves stakeholders in addressing and improving water system capacity.

Another important stakeholder group that deserves consideration is the general public. A water system's user base is perhaps the most affected stakeholder group of any listed. The Division strongly encourages all of the state's water systems to be open and transparent with their users in all aspects of water system operation, maintenance, and construction.

### **3.6 Asset Management**

#### **SDWA §1420(c)(2)(F)**

Asset management can help water systems address aging water infrastructure, make sound financial decisions to maximize limited financial resources, make costs transparent, and support budgeting decisions. A proper asset management plan can improve a system's service and reliability, reduce risk and unexpected costs, and

enhance communication with customers and stakeholders, in addition to many other benefits.

An asset management plan is the foundation for an effective asset management program and typically includes sections describing level of service goals, current performance metrics and measurements, future demand estimates, risk management, life cycle management plans (e.g., maintenance plans, rehabilitation and replacement plans), and financial forecasts.

The asset management framework is built on the following five core questions, the answers to which will form the basis of each section in the asset management plan.

1. What is the current state of the utility's assets?
2. What is the utility's required "sustainable" level-of-service?
3. Which assets are critical to sustained performance?
4. What are the utility's best "minimum life-cycle cost" capital improvement plan and operations and maintenance strategies?
5. What is the utility's best long-term financing strategy?

Utah DDW's capacity development program will use DWSRF set-asides and third-party contractors to provide training on these five core elements and promote and encourage asset management for all the state's public water systems. Asset management training will focus on helping systems understand asset management, developing asset management plans, identifying tools & techniques for inventory development, water system mapping methods, financial planning and implementation strategies including rate structures, billing policies and procedures, and proper budgeting methods. Other pertinent aspects of asset management plans and asset management programs will also be included based on water system input and comments.

In addition, Utah House Bill 269 *Capital Assets Related to Water*, was passed in the 2022 State Legislature and signed into law by the Governor. The law requires existing water providers to develop and implement a capital asset management plan before they can receive financial assistance from either state or federal funds. The law also requires that water providers participate in any infrastructure needs surveys or evaluations required by Utah DDW.

Utah DDW will send Capacity Assessment Worksheets to those systems ranked highest with respect to need for technical, managerial, financial, or asset management capacity assistance to ensure this foundation is established at the state's most vulnerable systems. Those systems that are, or may soon be, ranked "corrective action" or "not approved" or that are approaching an EPA ETT score of 11 will be targeted as high priority to receive the self-assessment worksheets. These self-assessment worksheets

include the five core components of asset management and references to Utah DDW's website for additional capacity assessment and asset management information. Utah DDW believes that capacity assessment and asset management can benefit all public water systems regardless of ranking and will provide training to encourage the state's systems to complete the self-assessment capacity worksheets and develop and implement capacity assessment and asset management programs.

Public water systems seeking financial assistance from the Drinking Water State Revolving Fund program must complete the Capacity Assessment Worksheets and submit them to Utah DDW for review and comment before any financial assistance will be approved. However, all public water systems are encouraged to download these worksheets and determine their needs with respect to technical, managerial, and financial capacity or asset management. Upon request Utah DDW will review each system's responses on the self-assessment worksheets and help systems better understand how to resolve any issue discovered during that review.

### **Capacity Development Worksheets**

Utah's legal authority to implement the SDWA's Capacity Development provisions in §1420(c)(2)(A) through (F) is codified in Utah Code Title 19 Chapter 4, the Utah Safe Drinking Water Act. The Utah Drinking Water Board is empowered by this statute to adopt rules governing the design, operation, and maintenance of Utah's public drinking water systems, including capacity development. The Board has adopted Drinking Water Rule *R309-800 Capacity Development Program* establishing a state capacity development program.

Utah's capacity development program rule provides a method for all existing drinking water systems to determine or demonstrate their technical, managerial, and financial capacity. The [capacity development worksheets](#), which have been updated to include questions regarding asset management, provide all systems, regardless of size or complexity, a means to perform a self-assessment and gauge their level of technical, managerial, and financial capacity. These self-assessments give the systems a starting point from which they can begin to plan for and implement changes to improve capacity and better manage assets to become more viable and resilient.

### 3.6 EPA ETT List FY2021 - 2023

Existing systems (Com, NTNC and TNC) list of PWSs (last three years) with an ETT score of 11 or greater for the Utah 2023 Annual Capacity Development Program Report.				
PWSID	PWS Name	PWS Type	Highest ETT	TMF self -assessment or TMF assistance - provide narrative
UTAH13001	ALTON TOWN WATER SYSTEM	Community	11	Assistance – System under Compliance Order to resolve physical deficiencies with source and storage as well as operator certification and cross-connection program deficiencies
UTAH03002	AMALGA TOWN WATER SYSTEM	Community	27	Assistance – System lacks a certified direct responsible charge operator, compliance assessment completed 3/24/2023; source protection issues; physical deficiencies at 4 active sources
UTAH28037	ASPEN RANCH	Non-Transient Non-Community	16	Assistance – Systems has failed to collect and report point of entry chlorine residual samples. Needs technical assistance to improve system technical capacity.
UTAH26050	BACK FORTY RANCH HOUSE GRILL	Transient Non-Community	12	Assistance – System has failed to collect and report nitrate samples. Needs technical assistance to improve technical capacity.
UTAH22090	BEAR RIVER ADMIN SITE	Transient Non-Community	11	Assistance – Triggered groundwater rule monitoring due to TC+/EC- results w/o reports; wellhead terminates approximately 5 feet below ground surface in 4-foot diameter casing, requires retrofit.
UTAH22033	BEAR RIVER CAMPGROUND	Transient Non-Community	11	Assistance – System sanitary survey 8/20/2020, IPS updated Sep 9, 2023, system is rated “Approved.”
UTAH22036	BRIDGER LAKE CAMPGROUNDS	Transient Non-Community	11	Assistance – System failed RTRC monitoring in June 2023, needs technical and managerial assistance
UTAH11053	BUENA VISTA COMMUNITY	Community	11	Assistance – System lacks redundant source, system needs technical assistance to resolve physical deficiencies on source and storage facilities
UTAH22114	BULL MOOSE WATERWORKS	Transient Non-Community	11	Assistance – System has temporary operating permit for source requiring treatment; system failed to monitor and report chlorine residuals; system has physical deficiency on storage tank
UTAH15023	CAMP ZARAHEMLA	Transient Non-Community	22	Assistance – System lacks complete Cross-Connection Control Program, otherwise no physical deficiencies or monitoring and reporting violations; system is rated “Approved”

### 3.6 EPA ETT List FY2021 – 2023 (cont)

UTAH29062	CAMPS BEN LOMOND-SHAWNEE	Transient Non-Community	11	Assistance – System lacks permanent operating permit; violation for lack of public notice linked to violation; system failed routine RTCR monitoring; system lacks complete Cross-Connection control program
UTAH25009	CEDAR FORT WATER SYSTEM	Community	11	Assistance – System failed to monitor and report distribution system chlorine residuals. System requires technical assistance to ensure samples are correctly drawn, analyzed and reported.
UTAH22112	CHRISTMAS MEADOWS CABINS	Transient Non-Community	13	Assistance – System has several physical deficiencies identified during sanitary surveys and requires technical assistance to resolve the issues.
UTAH02053	COLEMAN MOBILE HOME COURT	Community	11	Assistance – system received assistance from DDW and RWAU to resolve both physical deficiencies and operator certification violations. System has returned to compliance.
UTAH03005	CORNISH TOWN WATER SYSTEM	Community	16	Assistance – System requires technical assistance to resolve cross-connection control program deficiencies and operator certification deficiencies. System has applied for financial assistance to resolve physical infrastructure deficiencies.
UTAH26071	DANIELS SUMMIT ESTATES	Transient Non-Community	11	Assistance – System lacks sufficient storage for fire suppression.
UTAH10012	DAY STAR ADVENTIST ACADEMY	Community	11	Assistance – System DRC not certified at proper level. System lacks more than 20% of required storage capacity, issued a temporary exception to storage requirement (expires Aug 2024). System needs technical assistance on monitoring and reporting requirements.
UTAH22101	DEEP SPRINGS WATER CO	Community	13	Assistance – System not current on all DWSP Plans. Storage facility needs repair.
UTAH26033	DEER CREEK PARK	Transient Non-Community	32	Assistance – System spring collection area not fenced, issued a temporary exception which expires Jan 2024. System lacks more than 20% of required storage capacity, issued a temporary exception which expires Sep 2024. System needs technical assistance with monitoring and reporting.
UTAH23028	DELLE AUTO TRUCK STOP	Transient Non-Community	12	Assistance – System has several physical infrastructure deficiencies with temporary exceptions expiring July 2025.

### 3.6 EPA ETT List FY2021 – 2023 (cont)

UTAH24051	DESERT SAGE HOA	Community	30	Assistance – System lacks a cross-connection control program. System has numerous physical infrastructure deficiencies. System needs technical assistance with monitoring and reporting. System has received financial assistance to update and resolve infrastructure issues and will be consolidated with a local water conservancy district. Project is in progress.
UTAH26073	DIAMOND HILLS ASSOCIATION	Transient Non-Community	13	Assistance – System needs technical assistance with monitoring and reporting.
UTAH05001	DUTCH JOHN TOWN WATER SYSTEM	Community	12	Assistance – System needs technical assistance to ensure proper monitoring and reporting for phosphates in distribution system due to iron/manganese removal process at treatment plant.
UTAH25146	EAGLES LANDING	Community	11	Assistance – System needs technical assistance to ensure cross-connection control program is complete.
UTAH04012	EAST CARBON CITY	Community	11	Assistance – System needs technical assistance to ensure cross-connection control program is complete. System is building a new water treatment plant to resolve physical deficiencies in existing plant.
UTAH22003	ECHO MUTUAL WATER SYSTEM	Community	11	Assistance – System needs technical assistance to ensure cross-connection control program is complete. System has multiple TCR violations and is investigating spring sources as the cause. Drought has reduced spring flow rates to below sustainable levels and the System is investigating solutions to the problem.
UTAH12004	EUREKA TOWN	Community	12	Assistance – System needs technical assistance to update source protection plans. System needs technical assistance with monitoring and reporting requirements. System needs technical assistance to resolve operator certification issues.
UTAH11099	FOOTHILL WATER USERS ASSOCIATION	Community	23	Assistance – System has multiple physical infrastructure deficiencies. System has applied for financial assistance to help resolve these physical deficiencies. System needs technical assistance with monitoring and reporting violations. System needs technical assistance to ensure cross-connection control program is complete.

### 3.6 EPA ETT List FY2021 – 2023 (cont)

UTAH14032	GARRISON CHURCH	Transient Non-Community	11	Assistance – System needs technical assistance with monitoring and reporting.
UTAH02031	GIRLS HOME	Transient Non-Community	40	Assistance – System needs technical assistance to ensure cross-connection control program is complete.
UTAH03086	HIGH CREEK WATER CO	Community	12	Assistance – System failed to report annual water use or verify data accuracy. System has no means to measure flow rate of water treated at its chlorination facility or to measure flow rate of water produced at its source.
UTAH14050	INTERMOUNTAIN POWER SERVICE CORP	Non-Transient Non-Community	12	Assistance – This system has no IPS points reported in the Division’s database and is rated “Approved.”
UTAH01008	KENTS LAKE CAMPGROUND	Transient Non-Community	12	Assistance – System needs technical assistance with monitoring and reporting for RTCR.
UTAH18179	L & B RESOURCES	Non-Transient Non-Community	15	Assistance – This system has no IPS points reported in the Division’s database and is rated “Approved.”
UTAH22104	LAKE ROCKPORT ESTATES	Transient Non-Community	13	Assistance – System lacks sufficient storage capacity. System failed to report annual water use data. System has physical deficiencies that have not been resolved.
UTAH02078	M & J TRAILER HOME COMMUNITY	Community	17	Assistance – System has multiple physical deficiencies and needs technical assistance with monitoring and reporting. System has received financial assistance to update infrastructure and consolidate with a local water system. Project is proceeding.
UTAH11045	MEADOWS RANCH	Community	14	Assistance – System lacks updated source protection plans. System storage facility access hatches lack sufficient height above facility roof.
UTAH20039	MIA SHALOM RECREATION CAMP	Transient Non-Community	11	Assistance – System needs technical assistance with monitoring and reporting chlorine residuals.
UTAH15015	MOUNTAIN GREEN WATER ASSOCIATION	Community	11	Assistance – System has not implemented its source protection plan. System lacks backup power at a t least one non-naturally flowing source. System lacks sufficient fire flow.
UTAH29009	NORDIC MTN WATER COMPANY	Community	11	Assistance – System needs technical assistance to ensure its cross-connection control program is complete.
UTAH27086	NORTH VALLEY RANCHES SUB	Community	20	Assistance – System needs technical assistance with monitoring and reporting for RTCR.
UTAH11043	OLD MEADOWS WATER CO	Community	14	Assistance – System well house lacks flood protection and a floor drain. System needs assistance to resolve physical deficiencies.

### 3.6 EPA ETT List FY2021 – 2023 (cont)

UTAH12027	OLD PINERY RECREATION AREA	Transient Non-Community	12	Assistance – System needs technical assistance with monitoring and reporting nitrates. System needs to install pressure gauge on hydropneumatic tanks.
UTAH23075	PENNEYS GRILL LLC	Transient Non-Community	18	Assistance – System needs technical assistance to ensure cross-connection control program is complete. System needs to install level measuring device in its well.
UTAH22013	PEOA PIPELINE COMPANY	Community	14	Assistance – System needs technical assistance with monitoring and reporting chlorine residuals. System needs technical assistance to resolve operator certification issues. System failed to submit annual water use data.
UTAH02012	PORTAGE TOWN WATER SYSTEM	Community	14	Assistance – This system has no IPS points reported in the Division’s database and is rated “Approved.”
UTAH17023	RENDEZVOUS BEACH	Transient Non-Community	20	Assistance – System needs technical assistance to ensure cross-connection control program is complete. System lacks sufficient fire suppression storage.
UTAH25179	RIGTRUP EGG FARM PROCESSING PLANT	Non-Transient Non-Community	23	Assistance – This system has no IPS points reported in the Division’s database and is rated “Approved.”
UTAH25077	RIVERBEND GROVE INC	Transient Non-Community	22	Assistance – System lacks engineering approval and operating permits for all facilities. System lacks cross-connection control program. System is “Unapproved.”
UTAH19077	ROCKLAND RANCH	Community	13	Assistance – System needs technical assistance to ensure cross-connection control program is complete. System lacks an updated source protection plan.
UTAH04008	SCOFIELD TOWN	Transient Non-Community	11	Assistance – System needs technical assistance to ensure cross-connection control program is complete. System lacks a means to measure water levels in its well.
UTAH23046	SIMPSON SPRINGS CAMPGROUND	Transient Non-Community	11	Assistance – System lacks an updated source protection plan. System needs technical assistance with monitoring and reporting.
UTAH09053	SKOOTS CREEK SUBDIVISION	Non-Transient Non-Community	11	Assistance – System needs technical assistance to ensure cross-connection control program is complete. System needs technical assistance with monitoring and reporting RTCR.
UTAH29071	SNOWBASIN RESORT	Non-Transient Non-Community	12	Assistance – This system has no IPS points reported in the Division’s database and is rated “Approved.”

### 3.6 EPA ETT List FY2021 – 2023 (cont)

UTAH15029	STODDARD INN	Transient Non-Community	18	Assistance – System lacks a means to measure water levels in its well. System needs technical assistance with monitoring and reporting RTCR.
UTAH10016	SUN SLICKROCK RV LLC	Transient Non-Community	12	Assistance – System needs technical assistance to ensure cross-connection control program is complete. System needs flow measuring device on its well.
UTAH17030	SUNRISE CAMPGROUND	Transient Non-Community	11	Assistance – This system has no IPS points reported in the Division’s database and is rated “Approved.”
UTAH15038	TAGGARTS GRILL	Transient Non-Community	13	Assistance – System needs technical assistance with monitoring and reporting RTCR.
UTAH25082	TIE FORK REST AREA	Transient Non-Community	13	Assistance – System needs technical assistance with monitoring and reporting RTCR.
UTAH08043	TRAIL CYN RESIDENTS ASSN	Community	14	Assistance – System has an unapproved facility at the source. System lacks a flow measuring device at its source. System storage tank lack a gasket on the lid.
UTAH12028	UTAH GREENHOUSE COMPANY	Non-Transient Non-Community	11	Assistance – System needs technical assistance with monitoring and reporting RTCR.
UTAH17006	VISTA GRANDE	Transient Non-Community	12	Assistance – System lacks pressure gauge, smooth-nosed sample tap, and trapped air release on well discharge piping.
UTAH26010	WASATCH MOUNTAIN ST PARK	Transient Non-Community	11	Assistance – System lacks sufficient fire flow storage.
UTAH09019	WHITE BRIDGE CAMPGROUND	Transient Non-Community	14	Assistance – System needs technical assistance with monitoring and reporting RTCR.
UTAH22012	WILLOW DRAW WATER SYSTEM	Transient Non-Community	12	Assistance – This system has no IPS points reported in the Division’s database and is rated “Approved.”,
UTAH11069	WOODS RANCH	Transient Non-Community	11	Assistance – System needs technical assistance with monitoring and reporting RTCR.

### 3.7 DWRF Project List FY2023

During State Fiscal Year 2023 Drinking Water State Revolving Fund Program staff presented 33 construction project applications for federal DWSRF financial assistance to the Utah Drinking Water Board for funding approval. Each of these construction projects submitted the capacity assessment worksheets to DWSRF Program Staff with the financial assistance application. The submitted worksheets were reviewed and a capacity development report was drafted by staff prior to presenting the project to the Board for authorization.

Loan No.	System Name	System No.
3F1876	CANYON MEADOWS MUTUAL WATER COMPANY	UTAH26069
3F1874	BEAVER CITY WATER SYSTEM	UTAH01001
3F2002	UKON WATER COMPANY	UTAH02014
3F1911	HIDDEN LAKE ASSOCIATION	UTAH22029
3F1908	OGDEN CITY WATER SYSTEM	UTAH29011
3F1900	UPPER WHITTEMORE WATER CO	UTAH25136
3F1883	HANNA WATER & SEWER IMPROVEMENT DISTRICT	UTAH07062
3F1847	HOLDEN TOWN WATER SYSTEM	UTAH14013
3F1878	MORONI CITY	UTAH20013
3F1850	GRANGER-HUNTER IMPROVEMENT DISTRICT	UTAH18007
3F2001	GENOLA CITY	UTAH25012
3F1928	STOCKTON TOWN WATER SYSTEM	UTAH23010
3F1889	WALLSBURG TOWN WATER SYSTEM	UTAH26009
3F1913	PARAGONAH TOWN WATER SYSTEM	UTAH11014
3F1892	LEEDS DOMESTIC WATER USERS ASSOCIATION	UTAH27010
3F1851	SCIPIO TOWN	UTAH14011
3F1856	LEVAN TOWN WATER SYSTEM	UTAH12001
3F1904	WILSON ARCH WATER & SEWER SSD	UTAH19069

3F1930E	GREEN HILLS COUNTRY ESTATES	UTAH29053
3F1909	VIRGIN	UTAH27020
3F1890	PINE VALLEY MT FARMS	UTAH27061
3F1873	PROVO CITY	UTAH25006
3F1910	BRIAN HEAD TOWN WATER SYSTEM	UTAH11001
3F1929	WALES TOWN WATER SYSTEM	UTAH20010
3F1862	JOHNSON WATER DISTRICT	UTAH07006
3F1896	BALLARD WATER IMPROVEMENT DISTRICT	UTAH24001
3F1926	SPRING CITY	UTAH20008
3F1920	LEAMINGTON TOWN WATER SYSTEM	UTAH14012
3F1877	TIMBER LAKES WATER SSD	UTAH26057
3F1925E	GREEN RIVER CITY	UTAH08005
3F2008	KANE COUNTY WCD - JOHNSON CANYON	UTAH13038
3F2003	PAYSON CITY WATER SYSTEM	UTAH25021
3F1879	SOUTH DUCHESNE CULINARY WATER	UTAH07067

## Appendix A

### DWSRF Program Checklists

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF DRINKING WATER  
STATE OF UTAH REVOLVING FUND**

**PAYMENT REQUEST CHECKLIST**

Project Name  Project Number

Payment Request No.

Reviewer  Date

	Yes/Adequate    X    No/Inadequate    O    Not Applicable    N/A		
<b>1</b>	Are the correct certification forms (B1, B2, & B3 forms) included in the payment request?	<input style="width: 40px; height: 30px;" type="checkbox"/>	<b>PM</b>
<b>2</b>	Are the certification forms (B1, B2, & B3 forms) complete and signed by an authorized individual?	<input style="width: 40px; height: 30px;" type="checkbox"/>	<b>PM</b>
<b>3</b>	Has the community met all of the special loan authorization conditions?	<input style="width: 40px; height: 30px;" type="checkbox"/>	<b>PM</b>
<b>4</b>	Are all costs identified in the disbursement request supported by copies of checks and invoices/construction estimates of work in place?	<input style="width: 40px; height: 30px;" type="checkbox"/>	<b>PM</b>
<b>5</b>	Are construction estimates of work in place signed by a representative of the consulting engineering firm and the contractor?	<input style="width: 40px; height: 30px;" type="checkbox"/>	<b>PM</b>
<b>6</b>	Have all change orders for which payment is being requested been approved and added to the Project Cost Tracking Sheet?	<input style="width: 40px; height: 30px;" type="checkbox"/>	<b>PM</b>
<b>7</b>	Do the unit prices on the construction estimate of work in place agree with the unit prices on bid proposals and approved change orders?	<input style="width: 40px; height: 30px;" type="checkbox"/>	<b>PM</b>
<b>8</b>	Are quantities on pay request equal to or less than bid quantities, if not, has a change order been negotiated?	<input style="width: 40px; height: 30px;" type="checkbox"/>	<b>PM</b>
<b>9</b>	Has the physical existence of materials stored on-site been verified with copies of invoices?	<input style="width: 40px; height: 30px;" type="checkbox"/>	<b>PM</b>
<b>10</b>	Are all the costs identified in the request eligible for funding participation and allowable in accordance with the approved project scope?	<input style="width: 40px; height: 30px;" type="checkbox"/>	<b>PM</b>

- 11 If costs identified in the request are determined to be force account costs, was a force account proposal approved? (Use of water system labor)  PM
- 12 Are the cumulative costs for each contracted service or purchase within the contract ceiling?  PM
- 13 Date of last inspection:  By:   PM
- 14 Did the latest inspection determine that construction was proceeding without discrepancies which must be corrected prior to further payment?  PM
- 15 Are there sufficient funds in the project budget to complete the project? (bank/escrow reconciliation worksheet attached)  PM
- 16 Does the request include a cost which was incurred as a direct result of unapproved extended construction periods? If so, should it be paid from liquidated damages?  PM
- 17 If land is being acquired for this project, have the provisions of the Uniform Relocation Assistance and Real Property Acquisition Act (40CFR pt. 4) been adhered to? (must be a willing seller, if eminent domain was used, will not be eligible for SRF funds)  PM

18 FOR FINAL PAY REQUESTS VERIFY THE FOLLOWING:

- Final Inspection report with all the pending items addressed?  PM
- Certificate of Completion from the Engineer?  PM
- Lien releases secured from Contractors, Subcontractors & Suppliers?  
Private water systems only  PM
- Have the appropriate DBE Report(s) been submitted and are they up-to-date? (DBE: N/A FOR STATE PROJECTS)  PC
- System Asset Management Plan Submitted?  PM

I certify to the best of my knowledge and belief, this disbursement request has not been previously requested and should be made in accordance with the loan conditions.

Date

Project Engineer

Date

Accounting

**Pre-Closing Conference Call Checklist**

	Bond Counsel	Bill Prater	(801) 566-8882	bill@billprater.com
	Borrower Bond Counsel			
	DDW Manager	Michael Grange	(801) 536-0069	mgrange@utah.gov
	DDW Project Manager			
	System Presiding Official			
	System Treasurer/Recorder			
	Project Engineer			
	Environmental Consultant			

Project:  
 Funding:  
 Notes:  
 Target Dates:

System To-Do
Engineer To-Do
DDW To-Do

	Task Description	Responsible Party	Target Date	Comments
0	Capacity Assessment	DDW		NA for State
1	DWB Authorization Letter	DDW		
2	Discuss conditions on funding and timeframe to resolve	DDW		
3	Submit Engineering Report / Master Plan	Engineer		
4	Submit Water Conservation Plan	System		
5	Submit Asset Management Plan	System		
6	Submit Emergency Response Plan	System		NA < 3300 population
7	Submit Engineering Contract	Engineer		
<b>Legal</b>				
8	Submit Verification of Water Rights	Engineer		
9	Register for a Unique Entity ID at <a href="http://SAM.gov">SAM.gov</a>	System		NA for State, required for ARPA and BIL Supplemental, LSL, EC and Equivalency only projects
10	Submit copy of Project Notification to users / water bill insert	System		
11	Submit copy of Minutes showing public support of project	System		
12	Submit copy of Minutes from Rate Increase Hearing	System		
13	Submit Rate and Enforcement Ordinance for approval	System		
14	Verify new rates are adequate	DDW		
15	Parameters Resolution (submit copy of minutes that it passed)	System/ bond attorney		NA if private
16	Bond resolution (submit copy of minutes that it passed)	System/ bond attorney		NA if private
17	Deed of Trust (water)	System		Private only
17	Deed of Trust (real property)	System		Private only
17a	Title Commitment	System		Private only
18	Copy of Fidelity Bond (2x annual P&I payment)	System		
19	Attorney Opinion letter	System attorney		
<b>Environmental</b>				
20	<a href="#">Submit Environmental Review Checklist</a>	Engineer		NA for State
20a	Send environmental review checklist and cross cutter list	DDW		
21	Cultural Resources Report/Tribal Consultation	Engineer		
22	<a href="#">Submit consultation letter to SHPO</a>	DDW		
23	Publication of FONSI/CatEx	System		NA for State
24	Submit copy of FONSI/CatEx Affidavit of Publication	System		NA for State
25	Submit minutes of public meeting for FONSI	System		NA for State
<b>Plan Approval/ Bids</b>				
26	Provide SRF boilerplate to Engineer	DDW		BABA & DBE Equivalency projects only
27	Submit plans/specs to DDW	Engineer		
28	<a href="#">Plan Approval</a>	DDW		
29	Submit copy of Affidavit of Publication of Notices to Bid	Engineer		
30	Submit copy of Bid Tab	Engineer		
31	Submit copies of top 3 bid packages	Engineer		
31a	Submit Certification Re: Debarment	Engineer/Contractor		
31b	Submit Certification of Non-Segregated Facilities	Engineer/Contractor		
31c	Submit DBE Certification and Contact Log	Engineer/Contractor		NA for State
<b>Contract</b>				
32	Engineer's recommendation to award	Engineer		
33	Submit copy of Notice of Award	Engineer		
34	Submit copy of Construction Contract	Engineer		
35	Submit copy Payment and Performance Bonds for construction	Engineer		
36	Notice to Proceed	Engineer		
<b>Closing</b>				
37	Verify/update repayment schedule	DDW		
38	Construction Schedule / Quarterly Drawdown Schedule	Engineer		
39	Expenses incurred to date	Engineer		
40	Escrow Agreement (due a min of 2 weeks prior to loan closing)	System / DDW		
41	Executed Principal Forgiveness Agreement	System / DDW		if applicable (agreement or in bond documents)
42	Request Funds	DDW Finance		2 weeks prior to loan closing
43	Single Audit Letter	DDW Finance		NA for State - Equivalency projects only

## Appendix B

### Factors that Impact Capacity

Table A1 – Factors that Impact Capacity

Capacity Aspect	Factor	Measure	Impact
Technical	Source Adequacy	Valid Water Right	Systems with a legal right to the water they serve their users have additional control of that water including, source water protection and water quality, and available water quantity.
		Source Quantity	Sufficient source water quantity assures that the system is able to meet its water use needs to protect public health.
		Source Quality	Adequate source water quality helps systems better protect public health. It also reduces potential treatment costs related to treating water to drinking water standards.
		Source Protection	A system’s control over source protection issues provides additional public health protection as well as potentially reducing treatment costs.
	Infrastructure Adequacy	Facility Condition	Properly maintained water system infrastructure provides an environment conducive to good water quality as well as preserving water quantities delivered to users.
		Facility Life Expectancy	When properly maintained, water infrastructure can have significant life expectancy. This can help water systems continue to provide sufficient quantities of quality drinking water to their users at reasonable rates.
		Capital Improvement Plan	A capital improvement plan allows a system to proactively plan for infrastructure improvement projects. These projects can include major facility repair and/or new construction for both anticipated growth and compliance with drinking water standards.

Capacity Aspect	Factor	Measure	Impact
Technical (continued)	Technical Knowledge	Certified Operator	Properly certified operators positively affect water system capacity by applying their knowledge to provide the system's users with water that complies with drinking water standards and the SDWA.
		Operator Knowledge	Operators with sufficient knowledge of drinking water regulations, operations and maintenance procedures, and customer service contribute significantly to a water system's technical capacity.
		System O&M Program	A robust system operations and maintenance plan allows system staff to plan and follow through on proactive system maintenance which can significantly improve staff efficiency, infrastructure condition and life expectancy and reduce costs. A good plan also provides direction to staff on system policy, procedures and best management practices for each facility within the system.
	Knowledge Application	Operating Standards	Properly applied standards help system maintain public health protections.
		O&M Program Implementation	Proactive O&M Programs prolong infrastructure life and preserve water quality and volume.

Capacity Aspect	Factor	Measure	Impact
Managerial	Ownership Accountability	Owner Clearly Identified	A clearly identified owner indicates that the water system takes its responsibilities seriously. A clearly identified owner is typically more willing to be actively involved in running the system that complies with regulations and the SDWA.
		Owner Responsibility	An owner willing to take responsibility for system compliance are actively involved with system operations and ensure O&M policies and procedures are in place to maintain compliance and protect public health.
	Staffing & Organization	System Staff Clearly Identified	A well-defined organizational structure with clear lines of authority and management can reduce staff and constituent confusion and contributes to a well-run water system. An organization chart provides a visual description of the system's structure as well as the management and reporting structure.
		Operators Certified	Drinking Water systems are required to have at least one certified operator responsible for day-to-day system operation and maintenance. These operators should be clearly identified in the systems organization chart and other management tools.
		Operational Expertise	A well run system will properly maintain records related to system infrastructure, such as infrastructure maps, infrastructure construction/installation dates, maintenance work orders, monitoring schedules, and operational procedures and activities.

Capacity Aspect	Factor	Measure	Impact
Managerial (continued)	Effective External Linkages	Customer Interactions	A well-run water system will be transparent with its users, on both good news and bad. Effective communication with customers is critical to improving and maintaining managerial capacity.
		Regulator Interactions	One sign that a system has adequate managerial capacity is whether it views regulatory bodies as adversaries or resources. Better relationships with regulators can be a sign that a system is working to maintain or improve its managerial capacity.
		External Resources	This measure includes many different aspects including access to and willingness to use outside technical and financial assistance services. Systems with adequate managerial capacity will recognize and use assistance services offered by entities such as RWAU, AWWA, RCAC, DDW, the DWSRF program, etc.

Capacity Aspect	Factor	Measure	Impact
Financial	Sufficient Revenue	Revenue	Systems demonstrate adequate financial capacity through maintaining water rates sufficient to meet expenses. They will have appropriate rate and enforcement ordinances or bylaws, will regularly review rates and rate structures, will employ adequate budgeting policies and procedures, will have or establish debt and facility replacement reserve accounts, and will have emergency operating expense reserve accounts to carry them through challenging times.
	Sufficient Revenue (continued)	Expenses	Well run systems will track control expenses and will maintain sufficient revenue and reserve funds to cover expenses.
	Credit Worthiness	Paying bills on time	Systems demonstrate financial capacity by having sufficient revenue to meet their debt obligations in a timely manner, even in times of distress. Adequate rates and emergency operating fund accounts contribute to this measure.
		Access to Capital	A system's access to both public and private capital, as demonstrated by a good credit rating is a good indicator of a system's financial capacity.
Fiscal Management	Adequate Records	A well run system will have appropriate financial statements either prepared by a CPA or regularly audited by a CPA. An audit every three years is the recommended minimum.	

		Appropriate Budgeting and Accounting	A system with adequate financial capacity will use generally accepted accounting principles.
		Effective Revenue Management	The operating ratio, coverage ratio, and debt service ratio will all be within accepted parameters.

## Appendix C

### Operator Certification Website Overview Graphic

<https://deq.utah.gov/drinking-water/operator-certification>

## Operator Certification: Utah Division of Drinking Water

### Fee Changes for Operator Certification and Cross Connection Certification

The Utah Division of Drinking Water's fees for the Operator Certification and Cross Connection Control Certification programs are changing. Changes will go into effect on July 1, 2023, in order to comply with legislative requirements.

[Fee Increase Notice](#)

Public Water Systems may be required to have a certified Direct Responsible Charge Operator at a certain grade level depending on the system's classification, population, and complexity. Certified operators help improve compliance with regulations, minimize public health concerns, and maximize the performance of the system.

Water Operators protect water sources, monitor water usage, treat the water, monitor water quality, distribute the water, maintain the water system, and oversee the daily operations of public water systems.



#### Become Certified

Apply for an exam, find study help, browse our lending library, and check exam dates.



#### Certification Renewal

Maintain your certification. Information about Certified Operator responsibilities, including renewal process, CEU requirements, updating employer, and updating contact information.



#### Continuing Education Units

Get info about CEUs. Check your CEU credits, submit CEUs for approval, and find online CEU courses.



#### Forms and Fees

Find forms and pay fees. All forms and fees concerning water operator certification.



#### Training

Browse training options. Find local trainings, videos, webinars, and study materials for operators.



#### Tools & Resources

Discover tools for water operators. Water calculator Apps, spreadsheet calculators, water system reports, and math formulas for operators.



#### Commission & Rules

Learn about the program. Details about the Operator Certification Commission, rules, and policies.



#### Operator Hiring Center

Find water systems hiring operators, or let us know if you are hiring an operator.



#### Frequently Asked Questions

Find answers to common questions from operators.



[Click to read brochure](#)

#### Contact

Dawnie Jacobo ([DDWOpCert@utah.gov](mailto:DDWOpCert@utah.gov)) | (385) 272-5038

Last updated: July 26, 2023 at 10:50 am

Categories: [Certification](#) [Continuing Education](#) [Drinking Water](#)

[Certified Operators Report](#)

Search by operator or water systems to see certification details.

Appendix D

**Initial Order for New Public Water System**



State of Utah

SPENCER J. COX  
Governor

DEIDRE HENDERSON  
Lieutenant Governor

Department of  
Environmental Quality

Kim Shelley  
Executive Director

DIVISION OF DRINKING WATER  
Tim Davis,  
Director

Check off Workflow - Check once complete

Sent on

- WTTC Editor (Colt/Jen)
- Chems (David)
- Lead/Copper (Bridgette) (transient WS, not needed)
- Chlorination (Luke) (is not needed system does not disinfect or purchase disinfected water)
- Coliform (Sitara)
- Permitting (Hunter/DE)
- Source Protection (Deidre/Melissa)
- OpCert (Helen L./Dawnie) (system does not have a TP and is transient, not needed)
- Capacity Development (Michael Grange/Heather)
- Field Services (Ryan)

Sent on

- Water Quality Section Manager (Mark)
- COA Section Manager (Helen)
- Permitting Section Manager (Newberry)

Sent on

- Assistant Director (Michelle)
- Assistant Director (Nathan)

Sent on

- Attorney General (Bret/Shane)

Sent on

- Formatting and Tim's Signature (Jessica)
- Director (Tim)
- WTTC Editor (Colt/Jen)

Transient  
Non-Transient Non-Community  
Community

[Name of Legally Responsible Person]

Page 2 of 21

DATE

CERTIFIED MAIL

#####

[Name of Legally Responsible Person]

System

[Address]

City State, Zip

**Subject: Initial Order for New Public Water System for [Name of Water System and Number]**

[Name]:

According to available information, it has come to the attention of the Utah Division of Drinking Water (the "Division") that [Name of Legally Responsible Person], a Utah [Type of entity (limited liability company, non-profit corporation, etc.)], is the owner and/or operator of a public water system (PWS) as explained in the Utah Safe Drinking Water Act and the Utah Public Drinking Water Rules in R309-100-4. As a result, the Director of the Division of Drinking Water is required by law to initiate a formal administrative process to recognize the system as a new public water system and to ensure that it complies with both state and federal drinking water regulations. As part of that process, I have attached an Initial Order for New Public Water System explaining the requirements for the system.

The Division understands that compliance with state and federal legal requirements can involve significant administrative and financial burdens for public drinking water systems, especially new systems. Those regulations are designed to ensure that public water systems are able to provide safe and reliable drinking water to the people they serve. Coming into compliance with state and federal regulations can require time and resources. Utah's public water systems, including your system, provide essential services that directly impact human health and welfare.

The attached order includes contact information for Division staff with expertise in the rules and regulations that apply to public water systems. Containers for samples are available from all certified laboratories. While the Division cannot recommend a specific laboratory, we have enclosed a list of certified laboratories that perform water testing.

In all correspondence with our office and the laboratories, please indicate the public water system number. The number for your water system is UTAH[number]. Clearly mark the system number on all samples. Enclosed is the inventory list for your system. Please carefully review this report and return it to our office with any corrections.

Enclosed is also a copy of your Improvement Priority System (IPS) Report. IPS points are used to rate and track a water system's compliance with state and federal drinking water regulations. This report indicates several dormant deficiencies associated with the required actions listed in the attached Order. These dormant deficiencies serve as a tracking tool and reminder; they do not affect the water system's points or rating unless the due date for the required task has expired. The dormant deficiencies are removed from our database when the PWS completes the required tasks and notifies the Division.

The Division has online tools to help manage your water system, including:

- [Waterlink.utah.gov](http://Waterlink.utah.gov): WaterLink is an online tool that allows public water systems to access current system information, including the system's inventory, monitoring schedules, IPS Report, operator records, and the system's Bacteriological record for the last 12 months. To

[Name of Legally Responsible Person]

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get full use out of these tools, you will need to create a Waterlink portal account. You can do this by navigating to the Public/Portals menu on the top right side of the [waterlink.utah.gov](http://waterlink.utah.gov) home page and selecting the Portal. For help creating a WaterLink Portal account please contact Mz. (Tammie) Allen at (385) 272-5404 or [tammieallen@utah.gov](mailto:tammieallen@utah.gov)

- [Eqedocs.deq.utah.gov](http://Eqedocs.deq.utah.gov): Each water system's public records are available here. These records may include previous monitoring results, Division correspondence, former Consumer Confidence Reports, and other documents related to the water system. Browse to your water system listed alphabetically under "County" to see what we have on record for your system. Please call the Division at (801) 536-4200 if you have any questions.

We are here to help you through this process. If you have any questions about this Order, please contact Colt Smith at (385) 515-1529 or [acsmith@utah.gov](mailto:acsmith@utah.gov). To contest or appeal this Order, please contact Bret Randall of the Attorney General's office at (801) 536-0284 or [bfrandall@agutah.gov](mailto:bfrandall@agutah.gov) (alternatively Elizabeth Burns of the Attorney General's office at (385) 441-4789 or [elizabethburns@agutah.gov](mailto:elizabethburns@agutah.gov)).

Sincerely,

Tim Davis  
Division of Drinking Water

Enclosures: Initial Order for New Public Water Systems  
Improvement Priority System (IPS) Report  
Inventory List  
Total Coliform Sample Site Plan Template

cc: Terry Smith, Rural Water Association of Utah, [tsmith@rwau.net](mailto:tsmith@rwau.net)  
**Plan Review Engineer or District Engineer**  
**Shauna Benvegna-Springer, Utah Division of Public Utilities, [sbenvegn@utah.gov](mailto:sbenvegn@utah.gov)**  
**LHD**  
Bret F. Randall, Assistant Attorney General, [bfrandall@agutah.gov](mailto:bfrandall@agutah.gov) -or  
Elizabeth A. Burns, Assistant Attorney General, [elizabethburns@agutah.gov](mailto:elizabethburns@agutah.gov)  
EQDWMonitoring, EQDWCOA, and EQDWFS  
**[Insert Registered Agent from Finding 1.(c)]**

**UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**DIVISION OF DRINKING WATER**

<p><b>In the Matter of:</b></p> <p><b>[System Name], a Utah Public Water System (UTAH[Number])</b></p>	<p><b>INITIAL ORDER FOR NEW PUBLIC WATER SYSTEM</b></p> <p><b>Docket No. UTAH[Number]</b></p>
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This **INITIAL ORDER FOR NEW PUBLIC WATER SYSTEM** (“Order”) is issued by the Director of the Utah Division of Drinking Water (“Director”), under the Director’s legal authorities described below. This Order is issued to **[Name of Legally Responsible Person]**, a Utah **[Type of entity (limited liability company, non-profit corporation, etc.)]**, in **[his, her, its]** capacity as the “Supplier” who is legally responsible for the water system.

**STATUTORY AND REGULATORY AUTHORITY**

1. In 1974, Congress enacted the federal Safe Drinking Water Act, codified at 42 U.S.C. § 300f *et seq.*, as amended. 42 U.S.C. § 300g-2 allows states to achieve primary enforcement responsibility after the Environmental Protection Agency (“EPA”) has determined that the state has adopted and can implement a state program that is no less stringent than the federal public drinking water program (“Primacy”).
2. The Utah legislature has enacted the Utah Safe Drinking Water Act, codified at Utah Code § 19-4-101, with the intent of achieving Primacy.
3. Utah Code § 19-4-104 authorizes the Utah Drinking Water Board (the “Board”), among other things, to make rules regulating public water systems in the state of Utah. Utah Code § 19-4-104(1)(c)(vi) charges the Board to “meet the requirements of federal law related or pertaining to drinking water.” The Board has promulgated the Utah Public Drinking Water Rules, codified at Utah Administrative Code (“UAC”) R309.
4. In 1980, the EPA Administrator determined, in accordance with 40 C.F.R. § 142.11, that the Utah public drinking water program met the federal requirements for Primacy. See 45 Fed. Reg. 6647 (January 29, 1980). In accordance with 40 C.F.R. § 142.17, the EPA Administrator has reviewed, and continues to review annually, the Utah public drinking water program to evaluate its continuing compliance with the requirements set forth in 40 C.F.R. Part 142.
5. The Board has defined public water systems under the Utah Public Drinking Water Rules, UAC R309-110-4.
6. UAC R309-100-7 requires the Director to “assign a rating to each public water supply in order to provide a concise indication of its condition and performance” in accordance with

- R309-400. This rule is generally known as the Improvement Priority Rating (“IPS”) rating system.
7. The IPS rating system “is a point system used by the division to evaluate a public water system’s performance and compliance with the drinking water rules in Title 309, Environmental Quality, Drinking Water.” UAC R309-400-3(1). Under the IPS rating system, each public water system is assigned a rating “to characterize the water system’s compliance with drinking water rules and overall operation and performance.” UAC R309-400-3(2). The IPS rating system is “used by the division to assign compliance ratings to public water systems and to prioritize enforcement action based on points assessed for noncompliance with drinking water rules.” UAC R309-400-1(1).
  8. UAC R309-400-5 provides that a water system’s IPS rating shall be assigned “based on the total number of points assessed for noncompliance,” based on a point system established by the Board. Generally, the number of points represents the threat to the quality of the water and thereby public health.
  9. UAC R309-400-4(1)(a)(ii) sets the maximum number of points any given type of system may have before it is rated by the Director as “Not Approved” status. For systems exceeding the point threshold, the Director is required to issue a “Not Approved” rating. The thresholds are as follows: (i) for community water systems, 150 points; (ii) for non-transient, non-community water systems, 120 points; and (iii) for non-community water systems, 100 points.
  10. UAC R309-400-4 allows the Director to assess points against public water systems upon their failure to comply with Division directives and orders.
  11. UAC R309-400-5 allows the Director to rate any public water system as “Not Approved” at any time if an immediate threat to public health exists.
  12. UAC R309-400-5 provides that a public water system may qualify for a “Corrective Action” rating for its public water system upon submission of a written agreement stating a willingness to comply with the requirements set forth in the Rules and complying with other requirements.
  13. Pursuant to Utah Code § 19-4-106(d), the Director may enforce rules promulgated by the Board through the issuance of orders. See also UAC R309-100-8.
  14. Utah Code § 19-4-107 provides that upon discovery of any violation of a rule or order of the Board, the Director shall promptly notify the supplier of the violation, state the nature of the violation, and issue an order requiring correction of that violation.
  15. Utah Code § 19-4-109 provides that any person who violates the Act or a rule or order made or issued pursuant to the Act may be subject to an administrative penalty of up to \$1,000 per day of violation or a civil penalty of up to \$5,000 per day of violation.

16. [Insert #15 for Federal facilities only] The Director’s jurisdiction to issue this Order is based, in part, on Section 1447(a) of the Safe Drinking Water Act, codified at 42 U.S.C. § 300j-6. The federal act provides that if a state has achieved enforcement primacy, then federal agencies are subject to the jurisdiction of the state agency with enforcement primacy. In directing federal facilities to be subject to and to comply with all state requirements “in the same manner and to the same extent as any [non-governmental entity,]” the explicit language of the federal act demonstrates Congress’ intention that federal facilities be treated as any other public water system covered by the federal act and, in turn, the state law (the Utah Safe Drinking Water Act) and rules that implement the federal act. Thus, the Director is required to assert jurisdiction over the Supplier in this matter in the same manner and to the same extent as any non-governmental entity.

### FINDINGS

Based on information available to the Director, the Director makes the following Findings for purposes of this Order:

1. [Name of legally responsible person] (“Respondent”) is a [type of entity, Utah limited liability company, non-profit corporation, governmental entity of some type, a human being, etc.] Based on public records on file with the Utah Division of Corporations:
  - a. Respondent has the following registered business address: [business address]
  - b. The principal or owner of Respondent is [name of principal] with the following address: [Principal address]
  - c. The legal registered agent of Respondent is [Registered Agent name], with the following registered agent address: [Registered Agent address].
2. There exists a public water system (the “System”) located at [geographically location, insert an address or coordinates and a description of the closest town or landmark if address is not available]. The System is a public water system based on the following facts:
  - a. Respondent owns a [describe the type of business or operation, including when it operates]. There are approximately [number of residents or visitors and whether they are full-time residents]. Respondent serves culinary water to the foregoing population.

#### **NO OP:**

- b. The System has [describe the active source of culinary water- well, consecutive connection, surface water, etc.] and an independent distribution system serving approximately three service connections.

#### **NEW OP**

- c. On August 10, 2022, the Division issued Respondent an Operating Permit related to the System, including approval of the use of a groundwater source, Well 1 (WS001),

and an independent distribution system serving approximately **one** service connection.

Respondent owns and operates the System and is responsible for its maintenance and repair.

3. On **DATE**, Respondent submitted a Supplemental Form for New Public Drinking Water System signed and submitted by **PERSON**.
4. **[Name of administrative contact]** is the Division's administrative contact for the System.

### CONCLUSIONS OF LAW

Based on the foregoing Findings of Fact, the Director hereby makes the following conclusions of law:

1. Respondent is the owner and operator of the System, which is a public drinking water system within the meaning of the Utah Safe Drinking Water Act and the Utah Public Drinking Water Rules.
2. Respondent is a "Supplier" within the meaning of the Utah Safe Drinking Water Act, Utah Code § 19-4-102(10).
3. The System qualifies as a **community, non-transient non-community, transient non-community** Public Water System under the Utah Public Drinking Water Rules.

### ORDER

Based on the foregoing Findings of Fact and Conclusions of Law, IT IS HEREBY ORDERED as follows:

1. System Status: The System is hereby rated as an active but **["not approved" or "unrated" or "approved"] community, non-transient non-community, transient non-community** water system under the Division's water rating system rules, UAC R309-400. A water system's rating can only become "approved" after it obtains an Operating Permit from the Director for the entire water system, including its drinking water sources.
2. Plan Review

*Case by case basis -if no history in waterlink or d2 include this paragraph. Division review eng. Responsible can delete if they have worked with them previously and feel this is redundant-Primary purpose is to get a list of facilities, contact info, etc.*

- a. New Public Water System Supplemental Form: Included with this Order is a blank copy of the Division's New Public Water System Supplemental Form (the "Information Form"). **Respondent shall complete and return this form to the Division on or before 30 days from the date of issuance of this Order.** The

findings set forth in this Order, together with Division records, may be updated based on information submitted in the Information Form.

*Case by case basis-include if this new PWS that has existing facilities or new ownership to ensure they don't get stuck with previous owners ATF fees. This is an optional requirement to avoid ATF fees-up to the discretion of the Division review engineer to require or not*

- b. Engineering Evaluation Report: This water system was previously known and regulated as the XXXXXX (UTAHXXXXX) water system's design and construction have been reviewed for compliance with Utah's public drinking water system standards in Utah Administrative Code R309-500 through 550. OR Because the System has been in existence and operation prior to the date of this Order, **Respondent shall submit an Engineering Evaluation Report prepared by a Professional Engineer licensed to practice in Utah to the Division on or before 180 days from the date of issuance of this order.** The engineering evaluation report shall contain detailed information of all current drinking water facilities including source springs and/or wells, storage tanks, pumps, distribution system, number of connections, water rights, System schematics, etc. and hydraulic model report.

An Engineer Evaluation Report is a document to start the process of the Division's review of all the existing drinking water facilities associated with your system to ensure compliance with the current design and construction standards for public drinking water systems (Utah Code R309-550). The Division will use this report to enter all drinking water facilities into the Division's database and to determine all drinking water facilities meet applicable R309-500 requirements to protect the public's drinking water.

The Division will issue after-the fact Plan Approval and an Operating Permit for all drinking water facilities detailed in the Engineering Evaluation Report. A new water system's rating becomes "approved" after it obtains an Operating Permit from DDW. Please contact **ENG STAFF**, if you have any questions regarding the engineering evaluation report.

- c. Plan Review Files: Rules R309-500 through 550 govern the design, construction, operation, maintenance, and plan review procedure requirements for drinking water projects. Drinking Water Projects are defined in Rule R309-500-5(1) as any part of the project that includes the construction of, addition to, or modification of a public drinking water facility that may affect the quality or quantity of water delivered.

All Drinking Water Projects must have Division Plan Approval prior to construction and Division issuance of an Operating Permit before facilities can be placed into service. Please see our website for general information on the Plan Review process, documentation required, and contact **ENG STAFF** from the Division's Permitting Section regarding the permitting process.

*This section is meant to list the current/open/pending plan review files that still need to be followed up by the current owner. Perhaps if the list is long add a note about an attachment and print out the plan review summary report in Waterlink.*

- i. The System currently had the following plan review files in the Division's plan review database: (edit the items below to include recent history and state important approval dates or is something is missing, e.g. OP)
    1. **File # XXXXX – project name Review:** One line summary of project, include project history date of PA, OP etc. Highlight if missing any approval documentation required, and contact ENG STAFF from the Division's Permitting Section with any question regarding the permitting process.
    2. **File # XXXXX – Water System Sources:** This file was created to track the review of all sources. One line summary of project, include project history date of PA, OP etc. Highlight if missing any approval documentation required, and contact ENG STAFF
    3. (add following if need ATF language and no previous project history in waterlink) Because the System has been in existence prior to the date of this Order and/or had a period of inactivity, Respondent shall submit As-built Plans and Specifications as part of the Engineering Evaluation Report of all existing drinking water facilities for the Division to review and issue Operating Permits.
  - d. **Operating Permit: Respondent shall complete all of the Director's requirements to obtain an After-the-Fact Operating Permit on or before 18 months from the date of issuance.** The Division will assess 50 deficiency points for using unapproved facilities and 200 deficiency points for using an unapproved water source if this water system is in operation and does not obtain an Operating Permit for the entire water system on or before 18 months from the date of issuance.
3. Capacity Development Evaluation
- a. Drinking Water Rule R309-800 requires an assessment of a new water system's technical, managerial, and financial capabilities.
  - b. **Respondent shall comply with R309-800 by documenting the System's capabilities using one of the methods described on the Division's website.**
    - i. Existing water systems should submit completed copies of the Capacity Assessment Evaluation forms, located on the Division's website at: **<https://documents.deq.utah.gov/drinking-water/forms/DDW-2018-003083.pdf>**; or
    - ii. New or proposed water systems shall submit a business plan as described in UAC R309-800-5(4) for Division review and approval within one year of the date of issuance of this Order.

Receiving approval of the capacity assessment worksheets or the business plan is a prerequisite for issuing an Operating Permit for this water system. Please contact Michael Grange at (801) 536-0069 ([mgrange@utah.gov](mailto:mgrange@utah.gov)) for assistance related to Capacity Development/Assessment.

4. Sanitary Survey and Emergency Response

*For a PWS that has previously had a sanitary survey, put the due date 10/31 three years from that survey*

- a. Sanitary Survey: **Respondent shall schedule the onsite inspection/sanitary survey on or before 365 days from the date of issuance of this order and before an operating permit can be issued.** Please contact Ryan Dearing at 801-560-8456 or [rdearing@utah.gov](mailto:rdearing@utah.gov), if you have any questions regarding scheduling of the onsite inspection or engineering review. The last sanitary survey on record was performed by **STAFF** on **DATE**. (delete if no history)
- b. In the event of any situation constituting an emergency, the Supplier is required to contact the Division within eight hours of identifying the emergency as outlined in R309-105-18. Division personnel may be reached at all times by calling 801-560-8456. Emergency situations include any of the following:
  - i. Malfunction of any disinfection or treatment facility
  - ii. Malfunction of any treatment plant clearwell which constitutes a turbidity spike of 5 NTU for greater than fifteen minutes.
  - iii. Water discoloration for a significant number of connections that cannot be explained by air entrainment or re-suspension of sediments normally deposited within the distribution system.
  - iv. Malfunction or accident that could introduce surface water or other potential contamination into the distribution system, e.g. cross connection, major water break, chemical spill or overfeed, pressure loss, or natural disaster.
  - v. Threat of sabotage or act of vandalism to any drinking water facility.
  - vi. Any instance where a customer reports sickness from drinking the water and that claim is substantiated by a doctor.
- c. The supplier is advised to develop contingency plans to cope with possible emergency situations including earthquake, wildfire, flooding, and other natural or human caused disasters.

5. Cross Connection Control Program

Respondent shall develop a cross connection control program for the System to prevent any cross contamination. There are five elements to a cross-connection control program: local authority statement, annual public education or awareness, operator training, written records, and on-going enforcement. If you have any questions about the cross-connection control program, please contact Gary Rager at (801) 536-4498 ([grager@utah.gov](mailto:grager@utah.gov)).

- a. Respondent shall complete the local authority statement on or before **90 days** from the date of issuance.

- b. Respondent shall complete the annual public education or awareness, operator training, written records, and on-going enforcement on or before **180 days** from the date of issuance.

6. Source Protection Program

- a. **If the system and source are new to division records, insert this paragraph:** A Preliminary Evaluation Report (PER) is required for all sources connected to the System. Guidance for preparing the PER can be found online at <https://deq.utah.gov/drinking-water/preparing-source-protection-plans>. Please call (801)536-4200 and ask to speak to the source protection staff if you have questions about this requirement. **Respondent shall submit the PER on or before [Date].**
- b. **If the system and source are in compliance with SP requirements, insert this paragraph:** Based on information available to the Division, the System's source(s) is/are currently in compliance with source protection requirements. As a reminder, (an) updated source protection plan(s) will be due **on or before [Date]**. Guidance for preparing the updated plans can be found online at <https://deq.utah.gov/drinking-water/preparing-source-protection-plans>. Please call (801)536-4200 and ask to speak to the source protection staff if you have questions about this requirement.
- c. **If the system and source are not in compliance with SP requirements, insert this paragraph:** System source(s) is/are currently not in compliance with source protection requirements. **[Specifically describe problem here.] Respondent shall submit a corrected plan/PER/update on or before [Date].** Please call (801)536-4200 and ask to speak to the source protection staff if you have questions about this requirement.
- d. **If the only source is a wholesale connection to another system, insert this paragraph:** Since the System's current source(s) is/are solely (a) consecutive connection(s), source protection requirements do not apply. If any new sources are added in the future, source protection requirements may apply at that time. Please call (801)536-4200 and ask to speak to the source protection staff if you have questions about this requirement.

7. Operator Certification

A **community, non-transient non-community** drinking water system that serves a population of **<population>** requires a Direct Responsible Charge Operator (DRC) to be certified at a **<Distribution/Treatment Grade Level>** to operate the system. The System must obtain the appropriate grade level of certification on or before **365 days** from the date of issuance. For any questions regarding the operator certification rules, contact Dawnie Jacobo at (385) 272-5038 or **DDWOpCert@utah.gov**.

8. Consumer Confidence Reports

**Respondent shall prepare a consumer confidence report for the System and notify all System consumers of its availability and make it available upon request by July 1, 2024.** This report must include administrative information on the System, information on the source of water delivered, the level of detected contaminants during **2023**, information

regarding System violations and deficiencies, and other specific language as provided more fully in UAC R309-225-5. For any questions regarding the consumer confidence reports, contact Brandi Smith at (385) 515-1650 ([brandismith@utah.gov](mailto:brandismith@utah.gov)).

9. Monitoring and Reporting Requirements

a. Total Coliform Monitoring

**Respondent shall take at least one routine coliform bacteriological sample** from the distribution system and submit it to a certified laboratory for each calendar month that the water system is used. It is the responsibility of Respondent to send a copy of the results to our office by the 10<sup>th</sup> of the following month. In the event of a coliform positive result, Respondent shall take three repeat samples and a triggered source *Escherichia coli* sample for each ground water source in service at the time of the original positive sample. For any questions regarding the Total Coliform Rule or Groundwater Rule, contact Sitara Federico at (385) 515-1459 ([sfederico@utah.gov](mailto:sfederico@utah.gov)).

b. Total Coliform Sample Site Plan

**Respondent shall develop a written sample site plan** that identifies sampling sites and sample collection schedules that are representative of water throughout the distribution system. **Respondent shall collect the total coliform samples according to the written sample site plan** template. Included with this Order is a blank copy of the Total Coliform Sample Site Plan. For any questions regarding the bacteriologic sample site plan, contact Sitara Federico at (385) 515-1459 ([sfederico@utah.gov](mailto:sfederico@utah.gov)).

c. Lead and Copper Monitoring

Five lead and copper first-draw tap samples are required from the distribution system every six months. After two consecutive six-month sample periods, the frequency may be reduced to annual or once every three years. **Respondent shall send the results of the analyses to the Division.** Please refer to this letter for the most accurate information, or contact Bridgette Charlebois at (801) 247-7422 ([brcharlebois@utah.gov](mailto:brcharlebois@utah.gov)).

d. Chemical Monitoring

**Respondent shall monitor each source for six classes of chemicals:** Inorganics and Metals, Nitrate, Nitrite, Volatile Organic Chemicals, Radionuclides, and Pesticides. The sampling frequency for each class is different and will be specified after receipt of the new source chemistry results. Please contact David Kruse at (385) 566-7789 ([dbkruse@utah.gov](mailto:dbkruse@utah.gov)) with questions.

**Respondent shall monitor New Source Inorganics and Metals.** After the initial analysis has been done, and if the results are in compliance, then your source will be

required to be sampled for Nitrate once a year and Sulfate every three years. Please contact David Kruse at (385) 566-7789 ([dbkruse@utah.gov](mailto:dbkruse@utah.gov)) with questions.

e. Chlorination Monitoring:

i. **Respondent shall submit a quarterly chlorination report and distribution system chlorine residual results for the System to the Division.** The chlorination report and chlorine residual data are both due by the tenth day of the month following each quarter, i.e., January 10th, April 10th, July 10th, and October 10th.

ii. **Respondent shall take a chlorine residual at the point of entry to the distribution system (before the first connection) for every day that the system is treating water and shall be at least 0.2 ppm.** Additional chlorine residuals shall be taken from different locations throughout the distribution system a **minimum of 3 times per week**, for a total of 12 times per month in accordance with State Rules R309-105-10-(1)(c). The distribution system chlorine residual averages can be reported via the online form at <https://mrdl.utah.gov>.

iii. All chlorine residuals shall remain detectable in the distribution system, but shall not exceed 4.0 ppm. Please contact Luke Treutel at (385) 258-6084 ([ltreutel@utah.gov](mailto:ltreutel@utah.gov)) for disinfection by-products (DBP) sampling requirements.

f. Monitoring Schedule

A current monitoring schedule for the System has been enclosed. **Respondent shall become current with System total coliform monitoring and submit a sample site plan to the Division by [Date], lead and copper monitoring requirements by [Date], DBP monitoring requirements by [Date], and chemical monitoring by [Date].** Please contact Mark Berger at (801) 641-6457 ([mberger@utah.gov](mailto:mberger@utah.gov)) for general monitoring schedule questions.

### GENERAL PROVISIONS

1. Upon satisfactory compliance with the requirements in the Order section, the Director may issue a subsequent administrative order changing the status of the System to “Approved” in accordance with UAC R309-100-7 and R309-400. Pursuant to such subsequent order, the Director may also take other appropriate actions or impose appropriate conditions, based on the facts presented.
2. This Order does not in any way relieve the Supplier from any other obligation imposed under the Act or any other state, federal, or local law, rule, or regulation.

3. Nothing contained in this Order shall preclude the Director from taking actions to include additional penalties against the Supplier for future violations of State or Federal law.
4. The Date of Issuance shall be the date that the Director signs this Order.
5. The dates set forth in the Order section may be extended in writing by the Director, in the Director's sole discretion, based on the Supplier's showing of good cause. Good cause for an extension generally means events outside of the reasonable control of the Supplier, such as force majeure, inclement weather, contractor or supplier delays, and similar circumstances. However, the Director expects the Supplier to employ reasonable means to limit foreseeable causes of delay. The timeliness of the Supplier's request for an extension shall constitute an important factor in the Director's evaluation.

### **COMPLIANCE AND PENALTY NOTICE**

All violations of the Utah Safe Drinking Water Act, the Drinking Water Rules, and this Order will be strictly enforced during the time that this Order remains in effect. The Utah Safe Drinking Water Act, Utah Code § 19-4-109, provides that any person who violates a rule or order made or issued pursuant to the Act may be subject to an administrative penalty of up to \$1,000 per day of violation or, in a civil proceeding, to a civil penalty of up to \$5,000 per day of violation. Under certain circumstances of willfulness or gross negligence, a Utah district court judge may impose an additional penalty up to \$5,000 per day of violation. Under the act, each day may be considered a separate violation. A violator may also be subject to injunctive relief pursuant to Utah Code § 19-4-107(2).

### **CONTEST AND APPEAL RIGHTS**

1. This Order is **effective immediately and shall become final unless contested in writing within thirty (30) days** of the date of its issuance. This Order may be contested by filing a written Request for Agency Action in accordance with UAC R305-7. Filing a request for a hearing or a general statement of disagreement is not sufficient under Utah Code § 63G-4-201(3)(a) to preserve your right to contest this Order. A request for Agency Action must include the information specified in UAC R305-7. Contest proceedings are also governed by Utah Code Section 19-1-301. Failure to file a Request for Agency Action within the period provided waives any right of administrative contest, reconsideration, review, or judicial appeal. An extension is only available under UAC R305-7.
2. To contest this Order, the Supplier must respond in writing and must comply with the applicable procedural requirements found at UAC R305-7 and with the applicable requirements of the Utah Administrative Procedures Act, including Utah Code § 63G-4-201(3)(a) and (b). The Supplier's written Request for Agency Action must be filed and served in accordance with UAC R305-7-104(5) within 30 days of the date of issuance of this Order. For U.S. Mail delivery under UAC R305-7, the Director's address is Director, Division of Drinking Water, P.O. Box 144830, Salt Lake City, UT 84114-4830.

**IT IS SO ORDERED.**

DIVISION OF DRINKING WATER

By: \_\_\_\_\_

Tim Davis

Director

Date: \_\_\_\_\_

**System Name:** System Name  
**System Number:** System Number  
**Administrative Contact:** Name  
**Email:** email  
**Phone Number:** \*\*\*-\*\*\*-\*\*\*\*

**New System Order Due Dates**  
**Date of Issuance**

**Plan Review**

<b>Item 2a</b>	<b>New Public Water System Supplemental Form</b>	
	<b>Action</b>	<b>Completion Due Date</b>
	Submit a completed New Public Water System Supplemental Form.	Within 30 days of the Date of Issuance of this Order.
	<b>Division of Drinking Water Contact</b>	
	Jennifer Yee / Colt Smith 385-515-1501 / 385-515-1529 jyee@utah.gov / acsmith@utah.gov	

<b>Item 2b</b>	<b>Engineering Evaluation Report</b>	<b>Rule Citation</b>
		R309-500
	<b>Action</b>	<b>Completion Due Date</b>
	Submit an Engineering Evaluation Report prepared by a Utah licensed engineer containing detailed information on all system facilities.	Within 180 days of the Date of Issuance of this Order.
	<b>Division of Drinking Water Contact</b>	
	Assigned Engineer Phone Number Email	

<b>Item 2c</b>	<b>Operating Permit</b>	<b>Rule Citation</b>
		R309-500-4
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall complete all requirements to obtain an Operating Permit.	Within 545 days of the Date of Issuance of this Order.
	<b>Division of Drinking Water Contact</b>	
	Assigned Engineer Phone Number Email	

### 3. Capacity Development Evaluation

Item 3e	Capacity Development Evaluation	Rule Citation
		R309-800
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall complete all requirements for their capacity development.	Within 545 days of the Date of Issuance of this Order.
	<b>Division of Drinking Water Contact</b>	
	Michael Grange 801-674-2563 mgrange@utah.gov	

### 4. Sanitary Survey and Emergency Response

Item 4a	Sanitary Survey	Rule Citation
		R309-100-6
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall schedule an onsite inspection/sanitary survey.	Within 365 days of the Date of Issuance of this Order.
	<b>Division of Drinking Water Contact</b>	
	Ryan Dearing 801-560-8456 rdearing@utah.gov	

### 5. Cross Connection Control

Item 5a	Local Authority Statement	Rule Citation
		R309-105-12(2)
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall submit a complete Cross Connection Control Local Authority Statement to the Division	Within 90 days of the Date of Issuance of this Order.
	<b>Division of Drinking Water Contact</b>	
	Gary Rager 385-549-7609 grager@utah.gov	

Item 5b	Public Education, Operator Training, Record Keeping, On-Going Enforcement Implementation	Rule Citation
		R309-105-12(2)
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall complete the annual public education or awareness, operator training, record keeping and on-going enforcement plan and submit evidence to the Division	Within 180 days of the Date of Issuance of this Order.
	<b>Division of Drinking Water Contact</b>	
	Gary Rager 385-549-7609 grager@utah.gov	

**6. Source Protection Program**

<b>Item 6a</b>	<b>Preliminary Evaluation Report</b>	<b>Rule Citation</b>
		R309-600-13
	<b>Action</b>	<b>Completion Due Date</b>
	Respondent shall submit a Preliminary Evaluation Report	Within <b>180</b> days of the Date of Issuance of this Order.
<b>Division of Drinking Water Contact</b>		
Assigned SP Staff Phone Number Email		

<b>Item 6b</b>	<b>Drinking Water Source Protection Plan</b>	<b>Rule Citation</b>
		R309-600-7
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall submit a Drinking Water Source Protection Plan.	Within <b>365</b> days of the Date of Issuance of this Order.
<b>Division of Drinking Water Contact</b>		
Assigned SP Staff Phone Number Email		

<b>Item 6c</b>	<b>Submit Ongoing Source Protection Plans</b>	<b>Rule Citation</b>
	This system is already in compliance with source protection requirements. This is a reminder to submit updates	R309-600-7(2)(e)
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall submit source protection updates.	By <b>MONTH,DD,YYYY</b>
<b>Division of Drinking Water Contact</b>		
Assigned SP Staff Phone Number Email		

<b>Item 6d</b>	<b>Become Current With Source Protection Requirements</b>	<b>Rule Citation</b>
	This system's source(s) are not currently in compliance with source protection requirements.	R309-600-7(2)(b)
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall <b>*****</b>	By <b>MONTH,DD,YYYY</b>
<b>Division of Drinking Water Contact</b>		
Assigned SP Staff Phone Number Email		

**7. Operator Certification**

<b>Item 7</b>	<b>Operator Certification Requirement</b>	<b>Rule Citation</b>
	This system requires a direct responsible charge operator	R309-105-11
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall submit documentation to the Division showing the system has a direct responsible charge operator certified at the required level.	Within 365 days of the Date of Issuance of this Order.
	<b>Division of Drinking Water Contact</b>	
	Dawnie Jacobo 385-272-5038 DDWOpCert@utah.gov	

**8. Consumer Confidence Report**

<b>Item 7b</b>	<b>Consumer Confidence Report</b>	<b>Rule Citation</b>
		R309-225-4
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall submit a copy of the Consumer Confidence Report to the Division.	By July 1, 2024
	<b>Division of Drinking Water Contact</b>	
	Brandi Smith 385-515-1650 brandismith@utah.gov	

**9. Monitoring and Reporting**

<b>Item 9a</b>	<b>Total Coliform Monitoring</b>	<b>Rule Citation</b>
		R309-211
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall submit monthly routine coliform bacteriological samples to the Division each month the system is open.	By Date
	<b>Division of Drinking Water Contact</b>	
	Sitara Federico 385-515-1459 sfederico@utah.gov	

<b>Item 9b</b>	<b>Total Coliform Sample Site Plan</b>	<b>Rule Citation</b>
		R309-211-4
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall submit a written total coliform sample site plan to the Division.	By Date
	<b>Division of Drinking Water Contact</b>	
	Sitara Federico 385-515-1459 sfederico@utah.gov	

<b>Item 9c</b>	<b>Lead and Copper Monitoring</b>	<b>Rule Citation</b>
		R309-200-5(2) and R309-210-6
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall take and submit all required lead and copper sampling.	By <b>Date</b>
<b>Division of Drinking Water Contact</b>		
Bridgette Charlebois 801-247-7422 brcharlebois@utah.gov		

<b>Item 9c</b>	<b>Chlorination Monitoring</b>	<b>Rule Citation</b>
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall take and submit all required lead and copper sampling.	By <b>Date</b>
<b>Division of Drinking Water Contact</b>		
Luke 801-247-7422 brcharlebois@utah.gov		

<b>Item 9d</b>	<b>New Source Chemistries</b>	<b>Rule Citation</b>
		R309-515-4(5)
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall take and submit all required New Source Chemistries for each active source.	By <b>Date</b>
<b>Division of Drinking Water Contact</b>		
David Kruse 385-566-7789 dbkruse@utah.gov		

<b>Item 9d</b>	<b>Source Monitoring</b>	<b>Rule Citation</b>
		R309-200-5(1) and R309-205-5
	<b>Action</b>	<b>Completion Due Date</b>
	The respondent shall take and submit all required New Source Chemistries for each active source.	By <b>Date</b>
<b>Division of Drinking Water Contact</b>		
David Kruse 385-566-7789 dbkruse@utah.gov		

Appendix E

**2022 Updated  
State Capacity Development Program  
Strategy Document**

***State of Utah***  
***Capacity Development Strategy***  
***for New and Existing Systems***

***Utah Department of Environmental Quality***

***Division of Drinking Water***

***Salt Lake City, UT***

***December 2022***



UTAH DEPARTMENT *of*  
ENVIRONMENTAL QUALITY  
**DRINKING  
WATER**

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## **Section 1 – Introduction**

### **1.1 Authority**

The Capacity Development Program was created by the Safe Drinking Water Act Amendments of 1996. According to Section 1420(a), states are to *"ensure that all new community water systems and nontransient, noncommunity water systems commencing operations after October 1, 1999 demonstrate technical, managerial, and financial capacity with respect to each national primary drinking water regulation in effect, or likely to be in effect, on the date of commencement of operations."*

The Utah Drinking Water Board operates under authority granted in 1981, and upheld through subsequent reauthorizations, under Utah Code Title 19 Chapter 4, the Utah Safe Drinking Water Act. The Utah Drinking Water Board is a 9-person board appointed by the Governor. The Board is empowered to adopt rules governing the design, operation, and maintenance of Utah's public drinking water systems.

### **1.2 Program Rule**

The Utah Capacity Development Program is codified in Utah Administrative Code Rule *R309-800 Capacity Development Program*. The most recent version of the rule is available on the Division of Drinking Water's ["Drinking Water Laws and Rules"](#) webpage. The Utah Department of Environmental Quality, Division of Drinking Water (DDW, the Division) is the primacy agency for the federal Safe Drinking Water Act (SDWA) and implements and oversees the rules authorized by the Drinking Water Board. The program rule applies to new and existing drinking water systems and has been updated to meet the requirements of the America's Water Infrastructure Act (AWIA) of 2018, specifically to encourage water systems to develop and implement asset management programs.

#### *Public Involvement*

In order to implement the updated Capacity Development Strategy, Utah DDW was required to update its existing Capacity Development Program Rule to include references to asset management as required by AWIA. Utah DDW staff began updating the existing rule early in 2022. Proposed revisions were sent to a variety of individuals from stakeholder communities potentially impacted by changes to the rule and the strategy, including water systems, technical assistance providers, and consulting engineers. Comments were reviewed and evaluated, and appropriate changes were made to the proposed rule. The updated rule is expected to be adopted by the Drinking Water Board at its March 2023 meeting.

### **1.3 State Capacity Development Strategy Document**

Utah developed its initial Capacity Development Strategy in 1999 but has not reviewed

or modified it since then. In addition to the provisions set out in the America's Water Infrastructure Act (AWIA) of 2018 that require states to review and update their Capacity Development Strategies to include encouraging systems to prepare and implement asset management programs, there have been numerous regulatory, industry, and economic changes in the past 20 years that Utah DDW considered when reviewing and updating the state's Capacity Development Program Rule and Strategy Document. Utah DDW has completely updated this strategy document and its drinking water regulations to meet AWIA requirements as well as update the state's approach to capacity development.

This completely revised strategy document outlines programs, methods, and tools the Utah DDW will employ to ensure that new and existing public drinking water systems have or develop adequate technical, managerial, and financial capacity to operate and maintain viable, sustainable utilities to provide Utah's citizens and visitors with adequate supplies of quality drinking water. The revisions include recommending and encouraging all drinking water systems to develop and implement an asset management program, including an asset management plan.

The Capacity Development Strategy must include six distinct elements that all work together to aid water utilities in developing and maintaining this capacity. These six elements are defined in Section 1420(c)(2) of the Safe Drinking Water Act as modified by AWIA Section 2012 and include the following:

- A. Methods or criteria to prioritize public water systems
- B. Factors that encourage or impair capacity development
- C. How the State will use the authority and resources of the SDWA
- D. How the State will establish a baseline and measure improvements in capacity
- E. Procedures to identify interested parties
- F. Methods to promote, encourage, and assist systems to develop asset management programs, including asset management plans

These six elements are further defined and discussed in Section 4 of this strategy document.

To comply with AWIA's capacity development strategy update requirements states must complete the following steps:

- Solicit and consider public comments on the six strategy elements
- Describe which, if any, elements were excluded from the strategy and why
- Describe how the elements included in the strategy constitute a strategy to aid systems develop or improve technical, managerial, and financial capacity
- Describe how the state will implement this strategy and evaluate progress to improving water system capacity
- Document and report on the state's efforts to encourage and assist systems

develop and implement asset management programs in the state's annual report to EPA and triennial report to the Governor

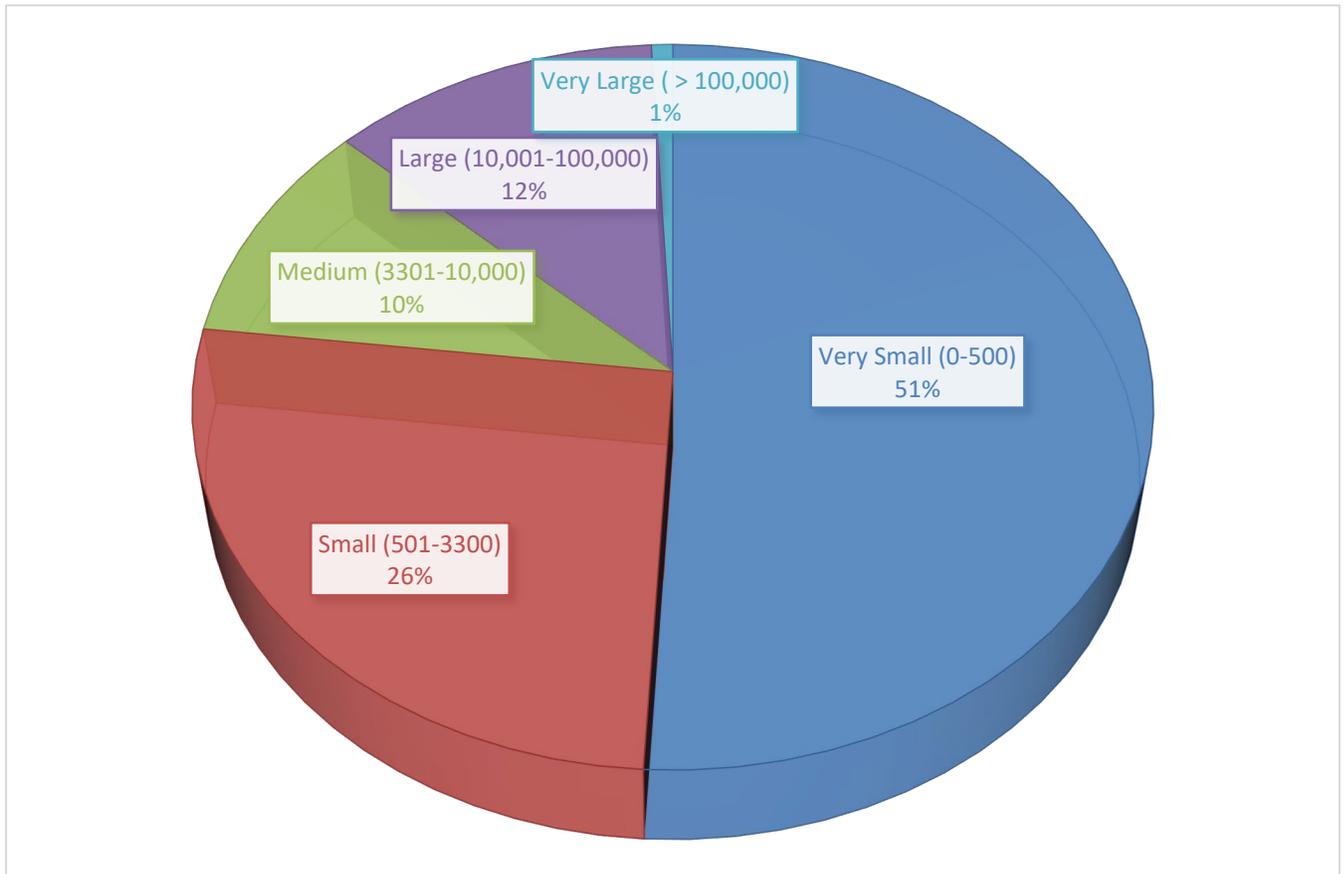
Furthermore, to comply with the AWIA asset management mandate in the updated capacity development program strategy Utah DDW has completed the following:

- Solicited and considered public comments on encouraging the development and implementation of AM plans and training and how it can best be incorporate to boost TMF capacity
- Described which elements may not need to be updated according to AWIA's asset management requirements
- Described how asset management can strengthen water utility's technical, managerial, and financial capabilities
- Described how Utah DDW will encourage water utility's to develop and implement asset management plans, how the updated strategy will be implemented, and how training programs and utility progress will be tracked and evaluated

By incorporating asset management into the strategy Utah DDW will be better able to document and report on the state's effort to encourage and assist water utilities to develop and implement asset management plans and create training in its annual program report to EPA and the triennial program report to the Governor.

## 1.4 Water System Demographics

As of November 30, 2022, there were 1,056 public water systems serving drinking water to Utah's residents and visitors. 507 of those systems are community water systems, and like many other states, most of Utah's community water systems serve populations fewer than 3,300.



These small systems often lack sufficient capacity to meet drinking water quality and quantity standards and mitigate challenges and account for the majority of the compliance violations issued by Utah DDW. To improve system capacity, Utah DDW encourages all drinking water systems to develop and implement asset management programs. Utah DDW works closely with technical assistance providers to develop asset management training courses and provide asset management training to the state's water utilities.

## **Section 2 – State Capacity Development Program Strategy – New Systems**

Section 1420(a) of the SDWA requires that states ensure that all new community water systems (CWS) and non-transient non-community water systems (NTNCWS), beginning operations after October 1, 1999, demonstrate they have adequate technical, managerial, and financial capacity to comply with both state and federal drinking water requirements. AWIA modified the SDWA to require that states encourage water utilities to develop and implement asset management programs. Utah’s legal authority to implement SDWA provisions is codified in Utah Code Title 19 Chapter 4, the Utah Safe Drinking Water Act. The Utah Drinking Water Board is empowered by this statute to adopt rules governing the design, operation, and maintenance of Utah’s public drinking water systems, including capacity development. The Board has adopted Drinking Water Rule R309-800 establishing a state Capacity Development Program. Utah DDW has revised this rule to include a section on asset management and encouraging water utilities to incorporate asset management as a means to improve system capacity. Utah’s capacity development program rule requires all proposed new systems, or newly discovered systems, to demonstrate adequate technical, managerial, and financial capacity through one of two methods:

1. Proposed new systems must submit a capacity development business plan, defined in R309-800-6(1), to Utah DDW for review and approval before it may serve drinking water to the public. The capacity development business plan requirement has been updated to require proposed systems include an asset management plan.
2. Newly discovered systems must either submit completed Capacity Assessment Worksheets or a Capacity Development Business Plan, whichever best suits the systems situation, to Utah DDW for review and approval. The Capacity Assessment Worksheets have been updated to include questions regarding asset management.

Both methods, updated to include asset management, provide water system owners the opportunity to understand the financial and operational commitment necessary to owning and operating a viable, sustainable public water system. They also provide Utah DDW staff an opportunity to discuss these commitments and regulatory requirements, as well as encourage asset management, with owners or prospective owners as well as determine a system’s capabilities and capacity to meet the requirements of the SDWA and Utah’s drinking water rules.

## **Section 3 – State Capacity Development Program Strategy – Existing Systems**

All water systems that are rated unapproved or that are in significant non-compliance with SDWA requirements or Utah drinking water rules are subject to assessment under the Capacity Development Program Rule. Each existing system subject to assessment

shall be evaluated based on the Capacity Development Criteria defined in R309-800-4(2) and the five core component framework for asset management plans in R309-800-5(3). The assessment shall also consider any other information, documents, and knowledge currently available to Utah DDW including, but not limited to, historical system documents, database records, sanitary survey results, local health department records, operator certification records, consumer confidence reports, capacity assessment and asset management self-evaluations, or Utah DDW staff knowledge.

## **Section 4 – Capacity Development Program Elements; SDWA 1420(c)(2)(A-F)**

### **A. Methods or Criteria to Prioritize Water Systems**

Utah DDW developed and defined a list of specific violations with a corresponding point value based on the severity of the infraction. The list is codified in Utah Administrative Code *Rule R309-400 Water System Rating Criteria (Improvement Priority System)*. This rule establishes the system by which the Division assigns compliance ratings to public water systems (PWSs) and prioritizes enforcement action and technical assistance to those systems. Asset management will be incorporated into Utah DDW's ranking system to evaluate water utilities compliance with state capacity development program and asset management regulations and help them understand asset management's importance to a system's overall capabilities.

DDW evaluates a PWS's compliance record and based on the total number of deficiency points, rates the system as "approved," or "not approved." The PWS classification determines how many deficiency points the PWS may accumulate before being assigned a "not approved" status. Community Water Systems may accumulate 150 deficiency points, Non-transient, Noncommunity Water Systems may accumulate 120 deficiency points, and Transient Noncommunity Water Systems may accumulate 100 deficiency points before being rated "not approved."

A "not approved" rating remains in place until the threat to public health is alleviated or the violation is corrected. However, a water system may qualify for a "corrective action" status, if the PWS submits the following three items:

- A written agreement stating a willingness to comply with the requirements of the Administrative Rules.
- A compliance schedule outlining the necessary construction or changes needed to correct any physical deficiencies or monitoring failures.
- Proof of financial ability to correct the deficiencies.

The "corrective action" rating remains in place until the system has resolved all compliance issues impacting the system's status.

Utah DDW uses this rating system to identify and prioritize which systems are most in need of technical assistance, training, or other help with respect to technical,

managerial, financial, or asset management capacity. This assistance may include any of the following:

- site visits
- administrative orders
- penalties
- on-site training
- hearings
- court action

Utah DDW may provide this assistance using internal staff or by employing a third-party technical assistance provider, such as the Rural Water Association of Utah (RWAU) or Rural Community Assistance Corporation (RCAC). The Action Compliance Strategy Meeting is a quarterly meeting where DDW staff meets with technical assistance provider staff and local health department (LHD) representatives to discuss out-of-compliance water systems and what assistance those systems may need to improve their capacity and return to compliance with SDWA and national water quality standards, including assistance with capacity development and asset management. A new compliance list is generated for each meeting to ensure that those systems requiring immediate attention are prioritized to receive timely technical assistance.

Utah DDW will provide “not approved” systems or systems that have an Enforcement Targeting Tool score of 11 or greater copies of the capacity assessment worksheets to help them evaluate the status of their technical, managerial, and financial capacity as well as asset management plans and programs. Technical Assistance Providers and Utah DDW staff involved in prioritizing systems for training and assistance opportunities will be trained in capacity development and asset management to ensure these utilities receive regular training and updates on capacity development and asset management. This will encourage systems to understand the importance of overall capacity and asset management’s role in that capacity.

Capacity assessment worksheets are required of all water systems seeking financial assistance through the Drinking Water SRF program. Utah DDW may also require a capacity assessment and asset management self-evaluation in other situations where such an evaluation is deemed helpful for systems to develop technical, managerial, financial, and asset management capacity. These evaluations will provide additional criteria to help Utah DDW prioritize those water utilities most in need of technical assistance.

## **B. Factors That Impair or Enhance Capacity**

Many factors have the potential to either enhance or impair a water system’s capacity. Division staff and technical assistance providers have held numerous discussions

regarding which factors are most likely to affect capacity. While capacity is measured through technical, managerial, and financial aspects, oftentimes a specific factor will have influence across multiple aspects.

For instance, adequate user rates and rate structures is one factor that both Division and technical assistance provider staff identified as having significant impacts on all aspects of system capacity, including asset management. Without adequate resources water systems will lack the financial wherewithal to hire and train appropriate staff which could negatively impact both technical and managerial capacity and maintaining asset management programs. In addition, there may be insufficient funds to pay bills on time which could negatively impact credit worthiness, and therefore negatively impact financial capacity. In addition, encouraging water utilities to develop and implement asset management programs and plans may enhance their technical, managerial, and financial resiliency. However, developing and implementing asset management programs may also be an impairment to water utilities due to additional work for system staff, Utah DDW staff, and TA providers.

Appendix A contains tables of identified factors that have the potential to impact water system technical, managerial, financial, and asset management capacity as well as whether that impact is positive or negative.

## **C. Using SDWA Authorities and Resources**

### **4.C.1 Assist PWSs with Compliance**

The Division has implemented a number of programs and activities, including asset management, to assist water systems achieve and maintain compliance with SDWA, national drinking water standards, and state drinking water rules. A few of these programs are described below.

- The engineering plan review and operating permit program.
  - Water systems are required to submit engineering plans and specifications to the Division for review and approval prior to beginning construction on any facility improvement or expansion.
  - The Division's Permitting Section reviews the submitted plans to assure compliance with the Division's construction rules (codified in Drinking Water Rules R309-500 through -550, which are available on Utah DDW's website.
  - The Permitting Section typically responds with plan approval or denial within 30 days of receiving the submittal, depending on project complexity and size.
  - This program allows Utah DDW to assess a system's technical capacity as it relates to infrastructure construction.

- The Drinking Water State Revolving Fund financial assistance program.
  - The Division’s Technical Assistance Section provides oversight to two revolving fund financial assistance programs.
    - The state-funded program receives an annual allotment from the state sales tax revenue, capped at approximately \$3,600,000 per year.
      - ◆ This financial assistance is available only to political subdivisions of the state (municipalities, water districts, etc.).
    - The federal revolving fund program receives an annual capitalization grant from USEPA based on Congressional allocation and varies from year to year.
      - ◆ Financial assistance from this program is available to both publicly and privately-owned water systems.
  - Financial assistance is available for planning or construction of infrastructure improvement projects designed to help water systems achieve or maintain compliance with SDWA requirements, national drinking water regulations, and state drinking water rules. Eligible planning activities also include preparing asset management plans.
  - Eligible water systems are also prioritized based on plans to improve technical, managerial, and financial capacity, including developing and implementing asset management programs.
  
- The source water assessment and protection program.
  - The source water assessment program assesses the risk of accidental contamination of all drinking water sources.
  - Encouraging water utilities to implement asset management programs and properly inventorying and maintaining their sources will provide another tool to help them improve their source protection programs.
  - Utah’s source protection rules require that each public drinking water supplier prepare a source protection plan. The plan must describe and delineate source protection zones and describe protections in place to protect source waters from accidental contamination.
  - All source protection plans must be reviewed and approved by Division source protection staff.
  
- The Sanitary Survey program.
  - Utah state regulations require that a sanitary survey be conducted at least every three years on all public water systems. These surveys assess

water system construction, operations, and record keeping and identify potential conditions that may present a public health risk.

- Sanitary surveys are conducted either by Division of Drinking Water personnel, Utah Department of Environmental Quality District Engineers, local health officials, or other qualified individuals authorized in writing by the Division Director.
- This program allows Utah DDW to assess a system's technical capacity based on infrastructure/asset condition at the time of the site visit. Systems that exhibit inadequate or aging infrastructure may require additional training on technical capacity and asset management to encourage them to improve compliance with SDWA and Utah's drinking water rules.

#### 4.C.2 Encourage Partnerships Between PWSs

Utah DDW encourages partnerships between water systems through a number of different avenues. These partnerships provide additional opportunities to encourage and advocate for systems to develop and implement asset management programs.

##### The Utah Water Quality Alliance

The Alliance consists of the largest surface water suppliers in Utah, as well as small- and medium-sized systems that operate water treatment plants. The Alliance meets quarterly and provides training to water system staff as well as networking opportunities for PWSs. The Alliance's goals include assisting drinking water utilities with water quality optimization projects, updating utilities on regulatory updates and new regulations, a commitment to continuous drinking water quality enhancement. Utah DDW will encourage Alliance members to be leaders in develop their own plans and then develop training programs that may benefit all systems in the state. Alliance members may also provide technical assistance to smaller systems that will now include assistance with asset management.

Alliance members work together to find ways to improve monitoring source water and treated water quality, optimize water treatment processes and enhance treatment plant performance in removing contaminants, evaluate new technologies, participate in drinking water research, provide input in the federal and state regulations, and assist smaller water utilities to produce drinking water of the best quality for the citizens of the State of Utah. As these larger systems develop and implement asset management programs their leadership and experience may encourage other systems to also develop and implement these programs. Utah DDW will encourage members of the Alliance to provide mentoring and training to smaller system staff helping them see the benefits of asset management and encouraging them to develop their own programs.

##### Utah WARN

The Utah Water/Wastewater Agency Response Network's (WARN) mission is to support and promote statewide emergency preparedness, disaster response, and mutual assistance matters for public and private water and wastewater utilities. The Utah WARN website provides members with emergency planning, contact, and recovery information, before, during, and after an emergency. Members of WARN can also promote and encourage asset management programs as a means to mitigate emergency situations as well as enhance all utility's ability to quickly and fully recover from emergency situations.

#### System Consolidation and Regionalization

The Division encourages water systems to investigate and implement regionalization or consolidation efforts to the extent possible. Regionalization or consolidation may take on a number of different forms, from merging system infrastructure, to sharing source capacity, to managerial cooperation where multiple neighboring systems share management and operational staff to reduce costs and take advantage of economies of scale and improve buying power. As systems regionalize or consolidate an active asset management program with an up-to-date asset management plan can ease the process of transitioning to a new management style or structure as well as provide invaluable information on system infrastructure, including operations and maintenance schedules and records.

#### 4.C.3 Assist PWSs through Operator Training and Certification

According to state statute, Utah water systems serving more than 800 people, systems required by federal statute, and all systems that use physical or chemical treatment processes to alter the water's characteristics, must have a certified operator. Utah DDW has the ability to encourage all regulated water utilities to implement asset management programs by including appropriate asset management training opportunities for continuing education credits as well as including asset management questions on certification tests.

Utah DDW's Operator Certification Program website (<https://deq.utah.gov/drinking-water/operator-certification>) provides individuals with information about the Operator Certification Program, details on how to become a certified water operator, certification application and renewal forms and their associated fees, information on upcoming continuing education opportunities, continuing education course forms, as well as a frequently asked questions section. Utah DDW will include information on asset management resources on this website and will work with technical assistance providers to ensure the most helpful, up-to-date information resources (including web links, guidebooks and reference documents, spreadsheets, etc.) are included on the website

Continuing education courses are offered by a number of different entities, including Rural Water Association of Utah, Rural Community Assistance Corporation, the

American Water Works Association Intermountain Section (AWWA-IMS), individual water systems, and various online providers. All courses submitted for operator certification continuing education unit credits must be reviewed and approved, or pre-approved, by the Utah Operator Certification Commission Secretary.

Utah DDW regularly works with technical assistance providers and those training the State's water supply operators to include courses on asset management programs and plans. Utah DDW staff also develop training material and participate in training courses for asset management.

#### **D. Establishing a Baseline and Measuring Improvements**

Utah uses the IPS point system outlined in Utah Drinking Water Rule R309-400 to establish baseline water system regulatory compliance. The Division tracks changes to a water system's deficiency points in the WaterLink database and web application. The WaterLink web application was developed to provide a central access point for Division information related to water systems, including contacts, deficiencies, violations, infrastructure inventories, site visit information, engineering plan review and approval activities, operator certification records, and DWSRF project data.

Community Water Systems may accumulate 150 deficiency points, Non-transient, Noncommunity Water Systems may accumulate 120 deficiency points, and Transient Noncommunity Water Systems may accumulate 100 deficiency points before being rated "not approved."

Utah DDW plans on including the development and implementation of asset management plans as information the state will consider tracking. The state will send out an existing system technical, managerial, financial, and asset management self-assessment worksheets to any system designated as "not approved." Technical assistance providers will assist systems in completing these self-assessments and the state will review them. Systems will be required to develop at least a basic asset management plan prior to being approved to ensure continued compliance and technical, managerial, and financial capacity.

WaterLink is available on the Internet at: <https://waterlink.utah.gov/deqWater/>. Public access to general water system information is available from the basic WaterLink access page. Access to more specific information requires users to apply for a portal account.

Compliance improvement will be measured based on the number of systems either reducing their deficiency point count, returning to compliance and an "approved" status after being rated either "not approved" or "corrective action," entering voluntary compliance agreements, or applying for and using financial assistance to resolve

infrastructure deficiencies. Improvement may also be measured based on a system's position on EPA's ETT list.

Utah DDW will provide "not approved" systems copies of the capacity assessment worksheets to help them evaluate the status of their technical, managerial, and financial capacity as well as asset management plans and programs. Technical Assistance Providers and Utah DDW staff involved in prioritizing systems for training and assistance opportunities will be trained in capacity development and asset management to ensure these utilities receive regular training and updates on capacity development and asset management. This will encourage systems to understand the importance of overall capacity and asset management's role in that capacity.

## **E. Identifying Stakeholders**

Stakeholders may include any party interested in evaluating or improving water system capacity. Stakeholders can include any or all of the following entities:

### **Regulatory Agencies**

- Environmental Protection Agency
- Division of Drinking Water
- Local Health Department
- County and/or municipal governments
- Governing boards and bodies for privately-owned water systems

### **Technical Assistance Providers**

- Rural Water Association of Utah
- American Water Works Association – Intermountain Section
- Rural Community Assistance Corporation
- Educational Institutions
- Environmental Finance Centers

### **Associations**

- League of Cities and Towns.
- American Planning Association
- Utah City Engineers Association

This list is by no means all-encompassing, and many other groups may consider themselves stakeholders in addressing and improving water system capacity.

Another important stakeholder group that deserves consideration is the general public. A water system's user base is perhaps the most affected stakeholder group of any listed. The Division strongly encourages all of the state's water systems to be open and transparent with their users in all aspects of water system operation, maintenance, and construction.

Utah DDW will work closely with all stakeholder groups to promote and encourage technical, managerial, and financial capacity and asset management among Utah's water utilities. Utah DDW will encourage stakeholders to take an active role with utilities through training and discussion to answer questions and provide feedback to Utah DDW to continuously improve training and hands-on assistance to water utilities during site visits and assessments.

## **F. Promoting Asset Management**

Section 2012 of the America's Water Infrastructure Act of 2018 requires that states include in their Capacity Development Program Strategies a description of how asset management will be promoted and encouraged within the state. Asset management can help water systems address aging water infrastructure, make sound financial decisions to maximize limited financial resources, make costs transparent, and support budgeting decisions. A proper asset management plan can improve a system's service and reliability, reduce risk and unexpected costs, and enhance communication with customers and stakeholders, in addition to many other benefits.

An asset management plan is the foundation for an effective asset management program and typically includes sections describing level of service goals, current performance metrics and measurements, future demand estimates, risk management, life cycle management plans (e.g., maintenance plans, rehabilitation and replacement plans), and financial forecasts.

The asset management framework is built on the following five core questions, the answers to which will form the basis of each section in the asset management plan.

1. What is the current state of the utility's assets?
2. What is the utility's required "sustainable" level-of-service?
3. Which assets are critical to sustained performance?
4. What are the utility's best "minimum life-cycle cost" capital improvement plan and operations and maintenance strategies?
5. What is the utility's best long-term financing strategy?

Utah DDW's technical assistance program will use DWSRF set asides and third-party contractors to provide training on these five core elements and promote and encourage asset management for all the state's public water systems. Asset management training will focus on helping systems understand asset management, developing asset management plans, identifying tools & techniques for inventory development, water system mapping methods, financial planning and implementation strategies including rate structures, billing policies and procedures, and proper budgeting methods. Other pertinent aspects of asset management plans and asset management programs will also be included based on water system input and comments.

In addition, Utah House Bill 269 *Capital Assets Related to Water*, was passed in the 2022 State Legislature and signed into law by the Governor. The law requires existing water providers to develop and implement a capital asset management plan before they can receive financial assistance from either state or federal funds. The law also requires that water providers participate in any infrastructure needs surveys or evaluations required by Utah DDW.

Utah DDW will send Capacity Assessment Worksheets to those systems ranked highest with respect to need for technical, managerial, financial, or asset management capacity assistance to ensure this foundation is established at the state's most vulnerable systems. Those systems that are, or may soon be, ranked "corrective action" or "not approved" or that are approaching an EPA ETT score of 11 will be targeted as high priority to receive the self-assessment worksheets. These self-assessment worksheets include the five core components of asset management and references to Utah DDW's website for additional capacity assessment and asset management information. Utah DDW believes that capacity assessment and asset management can benefit all public water systems regardless of ranking and will provide training to encourage the state's systems to complete the self-assessment capacity worksheets and develop and implement capacity assessment and asset management programs.

Copies of the capacity assessment worksheets are available in Appendix B and on the Utah DDW's website at:

<https://documents.deq.utah.gov/drinking-water/construction/DDW-2018-009523.pdf>

Public water systems seeking financial assistance from the Drinking Water State Revolving Fund program must complete the Worksheets and submit them to Utah DDW for review and comment before any financial assistance will be approved. However, all public water systems are encouraged to download these worksheets and determine their needs with respect to technical, managerial, and financial capacity or asset management. Upon request Utah DDW will review each system's responses on the self-assessment worksheets and help systems better understand how to resolve any issue discovered during that review.

## **Section 5 – Implementation Plan**

The state will encourage not only prioritized systems but all systems to improve the safety of their water by developing and implementing asset management plans that will boost their overall technical, managerial, and financial capacity. Improving public water system awareness of technical, managerial, and financial capacity and asset management will ensure Utah's water utilities develop are resilient systems capable of serving sufficient quantities of quality drinking water. Efforts to improve Utah's drinking water systems technical, managerial, and financial capacity requires the combined efforts of Utah's drinking water professionals, industry leaders, water system managers

and staff, and regulatory bodies to develop criteria, training, and methods that promote technical, managerial, and financial capacity and asset management to ensure the true causes of deficiencies are addressed prior to compliance issues surfacing.

Utah DDW will encourage the state's water utilities to develop and implement asset management plans through compliance related activities and our rating system, by providing technical assistance to water systems that focuses on developing and applying asset management tools, emphasizing asset management in budgets and finances, including questions in certification exams and CEUs for operators, and creating a process to implement continuous improvement in all training courses on asset management for operators, owners, and managers.

Utah DDW has implemented a policy that requires public water systems requesting financial assistance through the DWSRF Program provide a copy of their asset management plan to DDW for review and approval. If a water system does not have an asset management plan, financial assistance is available to prepare one. Preparing the asset management plan may progress simultaneously with the system's infrastructure construction planning and engineering design process funded by the DWSRF program.

Utah DDW will evaluate our public water systems success in developing and implementing capacity development programs and asset management plans and programs as outlined in this policy. Based on that evaluation, Utah DDW will then put policies and procedures in place that apply to all drinking water systems and will assist those systems with capacity development an asset management through training and technical assistance.

## Appendix A

### Factors that Impact Capacity

## Factors that Impact Capacity

Capacity Aspect	Factor	Measure	Impact
Technical	Source Adequacy	Valid Water Right	Systems with a legal right to the water they serve their users have additional control of that water including, source water protection and water quality, and available water quantity.
		Source Quantity	Sufficient source water quantity assures that the system is able to meet its water use needs to protect public health.
		Source Quality	Adequate source water quality helps systems better protect public health. It also reduces potential treatment costs related to treating water to drinking water standards.
		Source Protection	A system's control over source protection issues provides additional public health protection as well as potentially reducing treatment costs.
	Infrastructure Adequacy	Facility Condition	Properly maintained water system infrastructure provides an environment conducive to good water quality as well as preserving water quantities delivered to users.
		Facility Life Expectancy	When properly maintained, water infrastructure can have significant life expectancy. This can help water systems continue to provide sufficient quantities of quality drinking water to their users at reasonable rates.
		Capital Improvement Plan	A capital improvement plan allows a system to proactively plan for infrastructure improvement projects. These projects can include major facility repair and/or new construction for both anticipated growth and compliance with drinking water standards.

Capacity Aspect	Factor	Measure	Impact
Technical (continued)	Technical Knowledge	Asset Management Program	A well-thought-out Asset Management Program, including an Asset Management Plan, allows water systems to minimize the total cost of owning and operating assets and provide customers with the level of service they desire. Asset Management is a key to developing and maintaining a sustainable utility.
		Certified Operator	Properly certified operators positively affect water system capacity by applying their knowledge to provide the system's users with water that complies with drinking water standards and the SDWA.
		Operator Knowledge	Operators with sufficient knowledge of drinking water regulations, operations and maintenance procedures, and customer service contribute significantly to a water system's technical capacity.
		System O&M Program	A robust system operations and maintenance plan allows system staff to plan and follow through on proactive system maintenance which can significantly improve staff efficiency, infrastructure condition and life expectancy, and reduce costs. A good plan also provides direction to staff on system policy, procedures, and best management practices for each facility within the system.
	Knowledge Application	Operating Standards	Properly applied standards help system maintain public health protections.
		O&M Program Implementation	Proactive O&M Programs prolong infrastructure life and preserve water quality and volume.

Capacity Aspect	Factor	Measure	Impact
Managerial	Ownership Accountability	Owner Clearly Identified	A clearly identified owner indicates that the water system takes its responsibilities seriously. A clearly identified owner is typically more willing to be actively involved in running a utility that complies with regulations and the SDWA.
		Owner Responsibility	Owners willing to take responsibility for system compliance are actively involved with system operations and ensure O&M policies and procedures are in place to maintain compliance and protect public health.
		Asset Management Program	A fully implemented Asset Management Program provides information utility management can use to ensure decisions affecting system O&M and capital facility repair and replacement are made with the best, up-to-date information.
	Staffing & Organization	System Staff Clearly Identified	A well-defined organizational structure with clear lines of authority and management can reduce staff and constituent confusion and contributes to a well-run water system. An organization chart provides a visual description of the system's structure as well as the management and reporting structure.
		Operators Certified	Drinking Water systems are required to have at least one certified operator responsible for day-to-day system operation and maintenance. These operators should be clearly identified in the systems organization chart and other management tools.
		Operational Expertise	A well-run system will properly maintain records related to system infrastructure, such as infrastructure maps, infrastructure construction/installation dates, maintenance work orders, monitoring schedules, and operational procedures and activities.

Capacity Aspect	Factor	Measure	Impact
Managerial (continued)	Effective External Linkages	Customer Interactions	A well-run water system will be transparent with its users, on both good news and bad. Effective communication with customers is critical to improving and maintaining managerial capacity.
		Regulator Interactions	One sign that a system has adequate managerial capacity is whether it views regulatory bodies as adversaries or resources. Better relationships with regulators can be a sign that a system is working to maintain or improve its managerial capacity.
		External Resources	This measure includes many different aspects including access to and willingness to use outside technical and financial assistance services. Systems with adequate managerial capacity will recognize and use assistance services offered by entities such as RWAU, AWWA, RCAC, DDW, the DWSRF program, etc.

Capacity Aspect	Factor	Measure	Impact
Financial	Sufficient Revenue	Revenue	Systems demonstrate adequate financial capacity through maintaining water rates sufficient to meet expenses. They will have appropriate rate and enforcement ordinances or bylaws, will regularly review rates and rate structures, will employ adequate budgeting policies and procedures, will have or establish debt and facility replacement reserve accounts, and will have emergency operating expense reserve accounts to carry them through challenging times.
		Expenses	Well run systems will track control expenses and will maintain sufficient revenue and reserve funds to cover expenses.
	Credit Worthiness	Paying bills on time	Systems demonstrate financial capacity by having sufficient revenue to meet their debt obligations in a timely manner, even in times of distress. Adequate rates and emergency operating fund accounts contribute to this measure.
		Access to Capital	A system's access to both public and private capital, as demonstrated by a good credit rating is a good indicator of a system's financial capacity.
	Fiscal Management	Adequate Records	A well-run system will have appropriate financial statements either prepared by a CPA or regularly audited by a CPA. An audit every three years is the recommended minimum.
		Appropriate Budgeting and Accounting	A system with adequate financial capacity will use generally accepted accounting principles.
		Effective Revenue Management	The operating ratio, coverage ratio, and debt service ratio will all be within accepted parameters.
		Asset Management Program	A fully implemented Asset Management Program provides information utility management can use to ensure budgeting decisions, especially those related to asset maintenance or replacement, are made using current information.